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APPENDIX TO THE JOURNALS
OF THE
SENATE AND ASSEMBLY

OF THE
THIRTY-SIXTH SESSION

OF THE
LEGISLATURE OF THE STATE OF CALIFORNIA

VOLUME III.



SACRAMENTO:

W. W. SHANNON, : : : : SUPERINTENDENT STATE PRINTING.
1905.

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OF THE

SENATE AND ASSEMBLY

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LEGISLATURE OF THE STATE OF CALIFORNIA

VOLUME III



SACRAMENTO:

W. W. ENGLISH, STATE PRINTING OFFICE

1902

CONTENTS.

- 1—Biennial Report of State Board of Harbor Commissioners, Bay of San Francisco. 1902-1904.
- 2—Biennial Report of State Board of Harbor Commissioners, Bay of San Diego. 1904.
- 3—Biennial Report of State Board of Equalization. 1903-1904.
- 4—Report of State Board of Pharmacy. 1903-1904.
- 5—Biennial Report of State Board of Health. 1902-1904. ———
- 6—Biennial Report of State Board of Prison Directors. 1902-1904.
- 7—Thirty-fifth Annual Report of Insurance Commissioner. 1902.
- 8—Thirty-sixth Annual Report of Insurance Commissioner. 1903.
- 9—Fifth Report of the State Dairy Bureau. 1902-1904.
- 10—Report of Work of the Agricultural Experiment Station of the University of California. 1901-1903.
- 11—Testimony taken before Senate Committee of Investigation *in re* Charges against Senators Emmons, French, Bunkers, and Wright.
- 12—Supplementary Testimony and Report of Committee, *in re* Charges against Senators Emmons, French, Bunkers, and Wright.
- 13—Testimony taken before Senate Committee *in re* Investigation of Building and Loan Associations.

BIENNIAL REPORT

OF THE

Board of State Harbor Commissioners

FOR THE

TWO FISCAL YEARS COMMENCING JULY 1, 1902, AND ENDING
JUNE 30, 1904.



SACRAMENTO:

W. W. SHANNON, : : : : SUPERINTENDENT STATE PRINTING.
1905.

BOARD OF STATE HARBOR COMMISSIONERS.

CHAS. H. SPEAR, <i>President</i> ,	-	-	-	-	Commissioner.
JOHN C. KIRKPATRICK,	-	-	-	-	Commissioner.
J. D. MACKENZIE,	-	-	-	-	Commissioner.

JOHN M. FOY,	-	-	-	-	-	Secretary.
JAMES BYRNE, JR.,	-	-	-	-	-	Assistant Secretary.
LOTT D. NORTON,	-	-	-	-	-	Chief Engineer.
W. H. DAVIS,	-	-	-	-	-	Attorney.

OFFICE:

Union Depot and Ferry House, San Francisco.

BIENNIAL REPORT

OF THE

BOARD OF STATE HARBOR COMMISSIONERS.

SAN FRANCISCO, CAL., December 27, 1904.

To HON. GEORGE C. PARDEE, *Governor of California, Sacramento, Cal.:*

SIR: As required by law, the Board of State Harbor Commissioners for the harbor and port of San Francisco respectfully submits the following report for the two fiscal years commencing July 1, 1902, and ending June 30, 1904, embracing in detail all financial transactions of this department, and work done during the period named, together with such recommendations as the observation and experience of the individual members comprising the Board may deem expedient for the betterment of the commercial facilities of this port.

Statements of receipts and disbursements, and other subjects are classified under exhibits, as follows:

Exhibit A—Receipts and disbursements for the two (2) fiscal years ending June 30, 1904.

Exhibit B—Itemized statement of receipts and disbursements for the two (2) fiscal years ending June 30, 1904.

Exhibit C—Summary of receipts and disbursements, 1902–1904.

Exhibit D—Comparative statement of receipts and disbursements, 1863–1904.

Exhibit E—Statement of San Francisco Harbor Improvement Fund (State Treasurer, custodian) for the two fiscal years ending June 30, 1904.

Exhibit F—Statement of San Francisco Harbor Improvement Fund, November 4, 1863, to June 30, 1904.

Exhibit G—Statement of San Francisco Depot Sinking Fund, June 30, 1904.

Exhibit H—Statement of Deferred Payment Drafts Account for the two fiscal years ending June 30, 1904.

Exhibit I—Showing length and cost of seawall.

Exhibit J—Belt Railroad revenue and expense for the two fiscal years ending June 30, 1904.

Exhibit K—Work under way at date of last biennial report and since completed.

Exhibit L—Work contracted for and completed within the years June 30, 1902, and July 1, 1904.

Exhibit M—Work contracted for since June 30, 1902, but not yet completed.

Exhibit N—Statement of cost of dredging.

Exhibit O—Attorney's report.

Exhibit P—Expert Accountant's report.

The remarkable activity in shipping to and from this port during the past two years foreshadows the possibilities of our commercial trade in the future. Never in the history of San Francisco has the volume of shipping trade been so large as during the period which this report embraces.

Our traffic with Europe, Asia, South America, the Hawaiian and Philippine Islands, as well as with the principal seaports of the Atlantic coast, reached such a stage of activity that it was a matter of much concern whether we could afford sufficient port facilities to accommodate the largely increased traffic.

Every effort was made to provide all necessary facilities, and we are pleased to say, and the commercial community will concur in the statement, that every convenience and accommodation were afforded.

It is the policy of the Board of State Harbor Commissioners to discontinue all work of a temporary character that possibly can be discontinued, and all future improvements are to be made as permanent as possible. In the construction of wharves and other necessary appurtenances, the Board of State Harbor Commissioners has spent hundreds of thousands of dollars in making temporary improvements, seemingly always living in the present and having no thought of the future.

In the past year the Board has increased the revenue on the water front from rental about \$50,000 a year. These rentals were not increased so that they would become a burden upon the shipping interests, but the change was made simply to equalize the rentals that were being paid.

The greatest difficulty the Board has, at present, to contend with is not so much in accommodating the shipping of the port as it is in getting the consignees to remove the freight after being discharged on the docks. There seems to be a wrong interpretation of the use to which the docks should be put, many people holding that they should be used for warehousing goods and not for the purpose of receiving goods in transit.

The method of doing business on the water front has largely changed in the last four or five years, for the reason that all vessels from foreign

ports, which were formerly the great carriers of freight, used to put out on an average of 100 tons per day. Clipper ships and other vessels that formerly brought cargoes from domestic ports carried from 2,500 to 3,000 tons, and used to put out not to exceed 300 tons per day. The tramp steamer and the great steam carriers of to-day that have taken the place of the American clipper bring cargoes of from 8,000 to 12,000 tons and they discharge on an average of not less than 750 tons per day, thereby congesting the docks, for the reason that the hauling of freight by the consignees is not in keeping with the progress that has been made in the loading and discharging of ships. If the port of San Francisco had fifty per cent more dock room the same condition would exist, because the consignees would simply use, or attempt to use, the docks for warehousing instead of for the purposes for which they were constructed—namely, loading and discharging.

If San Francisco grows, which it is bound to do, to be the great commercial port that is pictured for her by the writers and thinking men of to-day, and if the present method of handling freight after it has been discharged from the ship continues and there is not a more rapid method of removing same from docks to warehouse or to store, we will never be able to do the great commercial business that is claimed to be ours by virtue of opening up the trade with the Orient and the world at large. It is said that San Francisco is an expensive port for shipping. That is not true when compared with Boston, New York, Philadelphia, or Seattle. In consulting Lloyd's Register, the words "free port" are used for Seattle and Boston, all of which is a misnomer. It is true that the docks of Seattle and Boston are not operated by the State, but they are controlled altogether through private or corporate channels. It certainly requires a large investment of capital to maintain docks in other seaports just the same as it does here; but as the State does not control them, there is no way we can determine whether the cost of construction and maintenance is greater than it is in San Francisco. There is a great deal to be said in favor of the State owning the water front, because it is then a free port in every sense of the word, with the exception that it certainly takes revenue to maintain it. The port of Boston is absolutely controlled by individuals or corporations, and it is impossible for a tramp steamer or a sailing vessel that is chartered to run into that port to get dockage accommodations until the steamer or sailing vessel controlled by the individual or corporation is first accommodated. Any vessel sailing into the port of San Francisco, it matters not from what part of the world she hails, is accommodated in regular order, paying no more nor no less than the line of sailing and steam vessels that make regular trips to this port.

The port of New York is no improvement on the ports of Boston or Seattle in handling its shipping interests, owing to the fact that the

water front is under the control or management of the municipality, which practically makes the public docks private property by issuing leases for from twenty to thirty years to private parties and corporations, thereby losing control of same for a long period, which the Harbor Commissioners think is a wrong idea and must cause unlimited trouble to shippers. For instance, a sailing ship, steamship, or lighter wishing to discharge or load must, instead of making application for a berth to the harbormaster or chief wharfinger, go to the lessee to obtain permission to dock. Now, in San Francisco, the Board of State Harbor Commissioners never loses control of its wharves, etc., as no long leases are issued, rentals being from month to month.

A great volume of money has been spent in the construction and reconstruction of pile docks, for the reason that the life of a dock constructed of preserved piles is about ten years. The loss per year is ten per cent, or, in other words, the pile dock costing \$70,000 has to be rebuilt every ten years; but with the advent of the cylindrical pier constructed of concrete, it looks as though a revolution has been made in the construction of docks and that the foundation is secure for an indefinite period. The oldest wharf that the Board of State Harbor Commissioners has constructed under the new process is the Pacific Street Wharf (Pier No. 7), which is ten years old and shows absolutely no deterioration. We have eight cylindrical docks. The aim of the Commissioners is to construct no other kind of pier but the cylindrical.

The last Legislature passed an Act submitting to the people of the State the question of bonding the water front for \$2,000,000 for the purpose of completing the seawall immediately south of the Ferry Building to Channel street, and also for constructing all necessary new piers and docks that may be required for the transaction of the business of the port. The money will be used as follows: The construction of 4,400 feet of seawall, that will approximately cost \$770,000; paving and curbing East street, 120 feet in width by 4,400 feet along the new seawall, costing about \$125,000; building eleven modern cylindrical piers along new seawall, having a total length of 9,600 feet and a width of 120 feet, amounting to \$1,105,000; aggregating \$2,000,000.

These improvements will create eight seawall blocks having an area of 357,490 square feet, equivalent to twenty 50-vara lots, that may be rented for commercial purposes and should increase the revenue of the Harbor Improvement Fund about \$60,000 per year and would be worth about \$1,000,000.

There will be an additional saving to the Harbor Commission, besides the rental of the seawall lots, of about \$20,000 a year that is now spent in maintaining pile and plank driveways and bulkheads. The total saving, including the increased revenue from the rental of the seawall lots, will be \$80,000 per year, which will pay the interest on the \$2,000,000 bond issue.

With these proposed improvements, the port of San Francisco will have the best and most complete dock accommodations that any port in the world enjoys, and will accommodate the shipping of the port for years to come.

The fact that the water front of San Francisco is self-sustaining is not generally known throughout the State. In fact, a large majority of the taxpayers believe that in voting for the bonds for the improvement of the San Francisco water front they are voting to raise their own taxation.

The port of San Francisco has Channel street that is a tributary to the bay, a navigable waterway leading from the harbor proper to Seventh street. It is now navigable to Sixth street, but could be made navigable as high up as Seventh street. The channel is a valuable adjunct to the balance of the water front for commercial purposes; in fact, it is a commercial necessity for the handling of all kinds of building material. The State controls 200 feet in width, 140 feet of which is waterway; the other 60 feet is used for wharves—30 feet on each side. The Harbor Commissioners believe that the waterway could be made more valuable for commercial purposes if the State would condemn a strip of land 70 feet in width on each side of the 30 feet now controlled by the State, making a width of 100 feet that would be valuable for the handling and distribution of cargo. A wharf 30 feet wide is altogether too narrow on which to handle building material, the abutting property getting the advantage, because the State can not utilize private property in the transaction of its business.

The channel is not all it should be, for the reason that the city of San Francisco has a large sewer that empties into it at Sixth street, thereby polluting the stream and making it very offensive and injurious to watercraft doing business along this frontage. The Sixth-street sewer should be removed and all sewage should be taken out to deep water at a point below Second street. If this were done, the Commissioners do not know of a more desirable place for the handling of building material. It would then be possible for the Harbor Commissioners to keep the channel dredged to a proper depth. As the Commissioners now see it, the very best commercial results are not obtainable. At present, the channel is an unsightly and unattractive feature of the water front. The Commissioners believe that the very best results can be obtained by having under State control all the water front, for the reason that all ships coming to this port, singly or in fleets, will be under the State's charge, and not dependent upon the consent of private individuals or corporations for wharfage accommodation.

Captain Silva, who is president of the American Association of Masters and Pilots of Steam Vessels, was visiting here a few weeks ago upon official business. The Harbor Commissioners gave him an outing on

the bay and explained to him the rules and regulations under which the Harbor Commissioners conduct their business, and he told us that we had the best regulated and fairest port in the United States, and he further said that he believed that the various seaport cities of the United States would be better off if the facilities of the water front were under State control.

The Harbor Commissioners also control and operate the Belt Railroad, which is located on the northern portion of the water front, thereby bringing together ship and rail in the northern portion of the city as well as in the southern portion, the Southern Pacific Company and the Santa Fé Company both having connection with the shipping on the southern portion. The Belt Railroad handled 60,000 cars last year.

The question that now confronts us is how we can utilize advantages, together with the facilities of the harbor front, to secure the best results. The water front of San Francisco has a length from Fishermen's Wharf to Central Basin of $3\frac{1}{2}$ miles, and Channel street a frontage of $1\frac{1}{4}$ miles, making $4\frac{3}{4}$ miles of water front that is in use for commercial purposes. The total length of wharfage is $9\frac{3}{4}$ miles, exclusive of bulkheads. We have ten docks 800 feet long and twenty-six docks 600 feet long, eight passenger ferry-slips and four car ferry-slips. The docks will accommodate at one time 220 vessels, at an average of 250 feet to each vessel.

IMPROVEMENTS.

The following is a summary of the principal improvements, etc., for the two fiscal years commencing July 1, 1902, and ending June 30, 1904:

Pier No. 9 (Broadway Wharf No. 1), constructing shed, etc.....	\$34,954 89
Pier No. 11 (Broadway Wharf No. 2), repiling, etc.	34,550 70
Pier No. 23 (Greenwich Wharf No. 1), constructing shed, etc.	15,654 00
Pier No. 25 (Greenwich Wharf No. 2), constructing shed, etc.	15,002 00
Pier No. 1 (Washington Street Wharf), repiling and repairing ..	4,381 54
Pier No. 4 (Mission Street Wharf No. 2), reconstructing with cylinder piers, etc.	11,983 83
Pier No. 8 (Howard Street Wharf No. 2), repiling and repairing	14,410 81
Pier No. 20 (Steuart Street Wharf), repairing approach	1,530 61
Pier No. 24 (Spear Street Wharf), treating piles (work done by State driver)...	2,171 50
Pier No. 26 (Little Main Street Wharf), constructing an addition.....	19,897 00
Pier No. 34 (Fremont Street Wharf), repiling and repairing damage caused by fire	11,051 81
Hay Wharf, repiling and repairing.....	2,999 50
New Dry Dock, repairing approach	1,797 97
Office buildings on wharves, construction of	4,875 00
Mud scows for Dredger No. 3, construction of two scows.....	15,974 00
Paving, other than done by State employés.....	1,909 77
Blasting and removing submerged rock at Harrison Street Wharf	2,350 00
For furnishing rock for Fishermen's Wharf breakwater	4,900 00
Seawall extension; constructing a section of seawall 600 feet north from Channel street, to cost about.....	95,000 00
Car Ferry Slip (China Basin), constructing ferry slip, etc.	79,150 44

Union Ferry Building, electric construction on tower	\$822 00
Slate roof on building.....	33,445 00
Iron and marble staircase in nave	2,987 00
Slip "A," for construction of, etc.....	62,973 84
Ferry slips, for reconstructing ferry slips from No. 1 to No. 7.....	40,335 13
For hydraulic hoist and apron, Slip No. 1, and renewing dolphins between Slips No. 1 and No. 2	9,807 26

DREDGING.

To maintain sufficient water for heavy-draft vessels in the approaches to our wharves and in the channels between and alongside thereof, required the constant operation of the three dredgers belonging to the State and of the two towboats that do the towing of all the floating property of the State and also act as fireboats in conjunction with the San Francisco Fire Department.

OTHER IMPROVEMENTS.

The work done, as outlined in the foregoing, while in itself large in extent and costly in expenditure, does not constitute all the improvements made. Special reference is made thereto for the reason that the work referred to constitutes the principal operations of the Board during the past two fiscal years. When there is taken into consideration the fact that our wharf structures embrace over $9\frac{3}{4}$ miles in lineal measurement, the older portions of which are built on unpreserved and unprotected piling, and the life of which, at best, is short, an idea of the magnitude of the necessary repairs on this vast stretch of territory is suggested, especially when these repairs are made as far as possible in a permanent manner. Aside from the shore repairs that constantly demand attention, the long stretch of wooden bulkheads, wharf roadways and piling, together with the approaches to the different wharves, is a matter of the greatest importance.

Respectfully submitted.

CHAS. H. SPEAR, President.

JOHN C. KIRKPATRICK, Commissioner.

J. D. MACKENZIE, Commissioner.

EXHIBIT A.

Receipts and Disbursements for the Two Fiscal Years ending June 30, 1904.

RECEIPTS.

Source.	1902-03.	1903-04.	Total.
Fishermen's Wharf	\$4,540 75	\$4,824 00	\$9,364 75
Sections "A," "B," Seawall No. 1, and Powell Street Wharf	11,996 35	14,221 05	26,217 40
Section 2, Seawall	3,381 30	4,880 75	8,262 05
Section 3, Seawall	13,268 77	16,208 04	29,476 81
Lombard Street Car Ferry Slip, and tolls	50,477 16	53,730 12	104,207 28
Greenwich Street Wharf No. 2	3,285 61	10,759 47	14,045 08
Greenwich Street Wharf No. 1	4,908 93	18,166 92	23,075 85
Filbert Street Wharf	16,522 66	16,457 20	32,979 86
Union Street Wharf No. 2	16,446 05	15,090 18	31,536 23
Union Street Wharf No. 1	15,089 35	10,370 58	25,459 93
Green Street Wharf	18,706 70	14,115 45	32,822 15
Vallejo Street Wharf	11,061 97	10,625 14	21,687 11
Broadway Street Wharf No. 2	19,051 61	37,739 01	56,790 62
Broadway Street Wharf No. 1	65 45	19,186 78	19,252 23
Pacific Street Wharf	17,296 16	18,268 66	35,564 82
Jackson Street Wharf	17,369 52	16,833 54	34,203 06
Washington Street Wharf	15,279 10	17,861 23	33,140 33
Clay Street Wharf	5,611 03	288 05	5,899 08
Union Depot and Ferry Slips, etc.	114,096 76	122,987 08	237,083 84
Mission Street Wharf No. 1	18,656 47	18,245 99	36,902 46
Mission Street Wharf No. 2	39,907 68	29,275 20	69,182 88
Howard Street Wharf No. 1	16,152 47	18,961 36	35,113 83
Howard Street Wharf No. 2	5,322 74	16,757 61	22,080 35
Howard Street Wharf No. 3	11,206 08	9,313 27	20,519 33
Folsom Street Wharf No. 1	18,000 00	19,500 00	37,500 00
Folsom Street Wharf No. 2	19,685 00	17,745 79	37,430 79
Harrison Street Wharf	10,446 15	8,351 76	18,797 91
Stewart Street Wharf	22,025 04	19,745 90	41,770 94
Spear Street Wharf	10,601 10	12,148 12	22,749 22
Main Street Car Ferry Slips, and tolls	24,978 89	45,056 76	70,035 65
Main Street Wharf	14,016 12	13,557 87	27,573 99
Beale Street Wharf	24,687 26	23,094 63	47,781 89
Fremont Street Wharf	12,340 61	7,346 82	19,687 43
Pacific Street Wharf	30,000 00	30,000 00	60,000 00
Second Street Car Ferry Slip, and tolls	86,794 59	92,271 45	179,066 04
Third Street Wharf	7,772 16	7,883 03	15,655 19
Fourth Street Car Ferry Slip	4,235 03	6,544 76	10,779 79
Berry Street Wharf	9,902 33	13,620 09	23,522 42
Channel Street Wharf	10,018 60	11,826 35	21,844 95
Center Street Wharf	547 30	7,655 36	8,202 66
San Francisco Dry Dock	5,500 00		5,500 00
Revenue from seawall lots	8,907 50	8,970 00	17,877 50
Sale of old materials	3,245 02	2,622 21	5,867 23
China Basin		1,000 00	1,000 00
Central Basin	1,487 00	49,764 50	51,251 50
Belt Railroad revenue	47,266 20	71,924 12	119,190 32
Belt Railroad (construction)	62 27		62 27
Tugs and dredgers (sale of old material)	103 55	120 96	224 51
Wharfage damages, sales, etc.	1,293 54	7,516 66	8,810 20
U. S. Customs Dept. (rent and dockage)	1,620 00	1,620 00	3,240 00
Post Office Station "D," etc.	3,226 44		3,226 44
Pacific States Tel. & Tel. Co.	126 00	216 00	342 00
Electric lighting		3,964 52	3,964 52
Dredging (Dredgers Nos. 1 and 2)	508 00		508 00
Drafts refused and canceled		88 60	88 60
Fire loss collected		7,464 62	7,464 62
Discount collected		1,494 13	1,494 13
	\$829,096 35	\$1,008,281 69	\$1,837,378 04
Deferred payment drafts		504,218 01	504,218 01
S. F. Harbor Imp. Fund, amount of drafts on State Treasurer	632,414 78	871,386 58	1,503,801 36
S. F. Harbor Imp. Fund, transferred to S. F. Depot Sinking Fund	55,572 00	55,572 00	111,144 00
Totals	\$1,517,083 13	\$2,439,458 28	\$3,956,541 41

EXHIBIT A—Continued.

Receipts and Disbursements for the Two Fiscal Years ending June 30, 1904.

DISBURSEMENTS.

	1902-03.	1903-04.	Total.
Administration account—			
Salaries of Commissioners	<i>a</i> \$9,600 00	<i>b</i> \$9,600 00	\$19,200 00
Salaries of Chief Engineer and Assistants	<i>a</i> 8,257 50	<i>b</i> 8,265 00	16,522 50
Salaries of Chief Wharfinger and Assistants	<i>a</i> 6,000 00	<i>b</i> 6,333 35	12,333 35
Salary of Attorney	<i>a</i> 2,400 00	<i>b</i> 2,400 00	4,800 00
Salaries of Watchmen	<i>a</i> 5,981 60	<i>b</i> 5,301 70	11,283 30
Collection of revenue—			
Salaries of Secretaries and Clerks	<i>a</i> 11,700 00	<i>b</i> 13,659 65	25,359 65
Salaries of Wharfingers	<i>a</i> 25,446 70	<i>b</i> 23,837 65	49,284 35
Salaries of Collectors	<i>a</i> 14,503 95	<i>b</i> 14,817 50	29,321 45
Expense account	<i>a</i> 20,221 96	<i>b</i> 10,383 35	30,605 31
Urgent repairs	<i>c</i> 67,758 88	<i>d</i> 59,836 83	127,595 71
Repairs (contract)	<i>c</i> 135,303 51	<i>d</i> 155,860 51	291,164 02
Pile-driving	<i>c</i> 15,491 74	<i>d</i> 25,162 52	40,654 26
Cleaning wharves and streets, and sprinkling streets	<i>a</i> 30,354 41	<i>d</i> 32,980 88	63,335 29
Wharf offices and furniture		<i>h</i> 545 12	545 12
Legal expenses	<i>a</i> 2,009 35	<i>b</i> 1,306 31	3,315 66
Fire account	<i>g</i> 6,170 53	<i>h</i> 6,768 03	12,938 56
Dredger No. 1	<i>i</i> 14,496 85	<i>j</i> 23,375 69	37,872 54
Dredger No. 2	<i>i</i> 15,569 19	<i>j</i> 35,181 82	50,751 01
Dredger No. 3	<i>i</i> 7,953 32	<i>j</i> 19,006 72	26,960 04
Dredging contract—			
Dredging by contract	<i>i</i> 11,199 00		11,199 00
Purchase of scows and dredgers	<i>j</i> 19,500 00	<i>x</i> 34,674 00	54,174 00
Tug "Gov. Markham"	<i>i</i> 10,589 86	<i>j</i> 13,319 19	23,909 05
Tug "Gov. Irwin"	<i>i</i> 10,264 77	<i>j</i> 16,150 93	26,415 70
Construction account	<i>c</i> 156,641 26	<i>d</i> 560,314 35	716,955 61
Seawall account		<i>k</i> 4,352 41	4,352 41
Dockage refunded	<i>g</i> 116 17	<i>h</i> 334 98	451 15
Tolls refunded	<i>g</i> 40 05	<i>h</i> 54 54	94 59
Wharfage refunded		<i>h</i> 194 33	194 33
Rent refunded	<i>g</i> 250 00	<i>h</i> 30 00	280 00
Switching refunded		<i>h</i> 22 50	22 50
Belt Railroad—			
Construction	<i>e</i> 14,242 48	<i>f</i> 402 71	14,645 19
Operating	<i>e</i> 43,408 15	<i>f</i> 43,593 35	87,001 50
Maintenance		<i>f</i> 25,695 79	25,695 79
Equipment		<i>f</i> 10,652 01	10,652 01
Wharfage damages, sales, etc.		<i>h</i> 23,246 23	23,246 23
Postoffice Station "D," etc., lighting	<i>g</i> 3,116 49		3,116 49
Electric lighting		<i>b</i> 28,308 70	28,308 70
Union Depot ferry slips, etc.	<i>a</i> 31,585 94	<i>b</i> 25,864 68	57,450 62
Insurance account		<i>b</i> 11,000 00	11,000 00
	\$700,173 66	\$1,252,833 33	\$1,953,006 99
Deferred payment drafts paid		232,102 22	232,102 22
S. F. Harbor Improvement Fund, amount remitted to State Treasurer	761,337 47	898,862 13	1,660,199 60
S. F. Harbor Improvement Fund, drafts refused and canceled		88 60	88 60
S. F. Depot Sinking Fund, transfer from S. F. Harbor Improvement Fund	55,572 00	55,572 00	111,144 00
Totals	\$1,517,083 13	\$2,439,458 28	\$3,956,541 41

a, b, c, d, e, f, g, h, i, j, k, x, see Exhibit "D."

EXHIBIT B.

Itemized Statement of Receipts and Disbursements for the Two Fiscal Years ending June 30, 1904.

RECEIPTS.

Month.	From Dockage, Tolls, Wharfage, Rents, Belt R. R., Transfer from S. F. Depot Sinking Fund, etc.	Deferred Payment Drafts.	Drafts Refused and Canceled.	Total.
1902—July	\$59,515 50			\$59,515 50
August	65,700 16			65,700 16
September	70,796 51			70,796 51
October	72,303 15			72,303 15
November	74,732 35			74,732 35
December	73,077 18			73,077 18
1903—January	67,191 10			67,191 10
February	66,594 12			66,594 12
March	65,147 43			65,147 43
April	71,509 43			71,509 43
May	65,805 46			65,805 46
June	76,723 96			76,723 96
Total 1902-03	\$829,096 35			\$829,096 35
1903—July	\$138,605 93	\$440,263 01		\$578,868 94
August	74,678 32			74,678 32
September	80,699 12			80,699 12
October	83,781 84	14,735 00		98,516 84
November	99,548 25		\$88 60	99,636 85
December	82,640 08	45,200 00		127,840 08
1904—January	75,129 51			75,129 51
February	70,354 29			70,354 29
March	75,705 08			75,705 08
April	79,817 58			79,817 58
May	73,011 67			73,011 67
June	74,221 42	4,020 00		78,241 42
Total 1903-04	\$1,008,193 09	\$504,218 01	\$88 60	\$1,512,499 70
Total 1902-04	\$1,837,289 44	\$504,218 01	\$88 60	\$2,341,596 05
Drafts drawn on State Treasurer (see Exhibit E)				1,503,801 36
Transfer to San Francisco Sinking Fund (see Exhibit G)				111,144 00
Grand total				\$3,956,541 41

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-03.

Date.	Order.	Rec. No.	On Account of.	Amount.
1902		Vol. 29.		
July 1	State Controller	646	S. F. Depot Sinking Fund	\$4,631 00
2	Darby Laydon	647	Repairs with scow driver	1,028 90
2	Darby Laydon	648	Repairing Secs. 1 and 2, Seawall ..	526 25
2	Darby Laydon	649	Repairing Howard St. Wharf No. 1 ..	1,322 00
2	Robert Wakefield	650	Repairing Second St. Slip	2,016 68
2	Black Diamond Coal Mng. Co	651	Coal	929 86
3	S. F. Specialty Co.	652	Enamel	7 50
3	John Fitzpatrick	653	Repairs	7 20
3	Wm. Clarke	654	Salvage on piles	5 00

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rec't. No.	On Account of.	Amount.
1902				
July 8	Robert Wakefield.....	*2	Constructing Pier No. 19 (Union St. Wharf No. 2) (D. P. 30).....	\$3,089 45
10	James H. O'Brien	655	Teams and carts.....	312 50
10	J. L. Couch	656	Services as carpenter.....	52 50
10	Employés	657-671	Payroll month of June, 1902	24,035 80
10	Mutual Elec. Light Co.....	672	Lights.....	1,324 24
10	Neill O'Neil.....	673	Repairing clock	1 50
11	James Mathews	674	Washing for fire house.....	3 50
14	Geo. F. Buswell	675	Frictions, Dredger No. 1	25 00
14	Geo. F. Buswell	676	Frictions, Dredger No. 2.....	35 00
14	Boston Woven Hose & Rubber Co.....	677	Packing	4 88
14	Betts Spring Co.....	678	Repairs, Belt Railroad	17 50
14	Bancroft-Whitney Co.....	679	California Reports	2 50
14	Cunningham, Curtiss & Welch	680	Toilet paper.....	10 00
14	H. S. Crocker Co.....	681	Stationery.....	142 32
14	Coast Metal Works.....	682	Motor	197 75
14	City Front Stables	683	Keeping horses.....	50 30
14	Cal. Electrical Works.....	684	Electrical goods	43 10
14	C. G. Clinch & Co.....	685	Glass, etc.....	183 71
14	P. F. Dundon's S. F. Iron Works	686	Repairs, Dredger No. 2	224 80
14	Dundon Bridge & Construction Co.....	687	Piles	314 58
14	Geo. E. Dow Pumping Engine Co.....	688	Valves.....	6 93
14	L. Feldman & Co.....	689	Dusters, etc.....	17 50
14	Flinn & Treacy.....	690	Gravel	205 00
14	Guide Publishing Co.....	691	Guides	10 50
14	H. T. Holmes Lime Co.....	692	Lime	1 60
14	W. T. Garratt & Co.....	693	Gauges	10 20
14	Goodyear Rubber Co.....	694	Hose	10 26
14	Gray Bros.....	695	Rock	46 75
14	Gorham Rubber Co.....	696	Packing	5 63
14	Holbrook, Merrill & Stetson	697	Hardware	22 00
14	S. G. Hindes	698	Pump	115 00
14	J. Hendy Machine Wks.....	699	Brake shoes	21 20
14	C. J. Hendry Co.....	700	Chandlery	74 40
14	Judson Mfg. Co.....	701	Fish plates	193 77
14	P. L. Jones & Co.....	702	Repairing buggy.....	20 15
14	J. W. Murphy.....	703	Keeping horse	28 50
14	Merchants' Exchange	704	Reporting	25 00
14	Marine Exchange.....	705	Reporting	25 00
14	McCormick Bros.....	706	Bars	23 54
14	Main St. Iron Works.....	707	Repairs	25 60
14	James Neglan.....	708	Cedar poles	122 50
14	H. M. Nagle	709	Brushes, etc.....	35 50
14	W. S. Phelps & Co.....	710	Blacksmithing	679 77
14	Pac.States Tel.& Tel. Co.....	711	Telephones.....	158 25
14	Payne's Bolt Works	712	Bolts	27 55
14	Rowlands & Laughton.....	713	Repairs	56 22
14	Studebaker Bros. & Co.....	714	Repairs.....	30 35
14	Standard Oil Co.....	715	Oil	23 90
14	Scott & Van Arsdale Lumber Co.....	716	Lumber.....	189 56
14	Spring Valley Water Works	717	Water.....	258 48
14	Geo. H. Tay Co.....	718	Hardware	78 15
14	U. S. Laundry Ass'n.....	719	Laundry	18 75
14	Whittier-Coburn Co.....	720	Oil	16 00
14	L. E. White Lumber Co.....	721	Lumber	84 00
14	Chas. A. Warren	722	Rock	113 50
12	Archie Pow	723	Teaming	81 64
12	Southern Pacific Co.....	724	Repairing Second St. Slip.....	500 72

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1902				
July 12	James Young.....	725	Mill work.....	\$245 00
14	Falkenau Assaying Co..	726	Analysis.....	25 00
14	Western Fire Appliance Co.	727	Extinguisher.....	15 00
14	Fairbanks, Morse & Co..	728	Repairing scales	3 75
14	Jas. Wilder.....	729	Towing piles.....	43 00
14	Alex. Heins Belting Co..	730	Pump leathers.....	40 00
14	F. M. Berryman.....	731	Repairing wagon	8 00
15	Woodin & Little.....	732	Pipe, etc.....	161 66
15	Call, Chronicle, and Examiner.....	733	Newspapers	5 85
16	Clough Anti-Germ Wafer Co.	734	Wafers	4 50
17	Colored Citizens' Window and House Cleaning Co.	735	Cleaning windows.....	20 00
17	Pacific Coast Dredging and Reclamation Co..	736	Dredging Channel St.	683 75
17	Robert Wakefield.....	737	Constructing bulkhead between Piers 25 and 27.....	2,431 47
17	Evening Post.....	738	Advertising.....	66 00
17	J. D. Spreckels & Bros..	739	Rebate of rent.....	250 00
21	W. B. Ferral.....	740	Services as painter	64 75
22	Industrial Home for Blind.....	741	Brooms	12 00
23	M. H. Newhall & Co.	742	Cement.....	1,765 89
23	Novelty Sign Co.	743	Wiring tower.....	719 50
23	H. M. Newhall & Co.	744	Cement.....	1,232 00
24	Robert Wakefield.....	†761	Constructing Greenwich Street Wharf No. 1.....	2,650 96
24	Darby Laydon.....	762	Repairing Howard Street Wharf No. 1.....	857 84
24	Darby Laydon.....	763	Repairing Sections 1 and 2, Sea wall.....	406 81
16	Robert Wakefield.....	*396	Constructing Pier 21 (D. P. 57)	3,234 42
22	Healy, Tibbitts & Co.	*74	Repairing Slips 1, 5, 6, and 7 (D. P. 46).....	1,706 05
24	Robert Wakefield.....	Vol. 28 *1386	Constructing Car Ferry Slips 1 and 2 (D. P. 4)	3,649 75
28	Robert F. Crockard.....	Vol. 29 764	Iron wrench.....	4 00
30	Geo. E. Dow Pumping Engine Co.	765	Repairs.....	13 50
30	Flinn & Treacy.....	766	Gravel.....	131 25
30	E. M. Graney.....	767	Shoeing horses.....	17 50
30	James Byrne, Jr.	768	Petty cash expenses.....	118 60
31	State Treasurer.....	769	Remittances.....	53,577 53
	Total July, 1902.....			\$118,074 02
Aug. 1	State Controller.....	770	S. F. Depot Sinking Fund.....	\$4,631 00
1	Darby Laydon.....	771	Repairs with scow driver.....	1,182 80
2	J. Anderson & Son.....	772	Repairing locks and keys.....	19 35
6	A. P. Azone.....	773	Gilding flagpoles, etc.....	25 00
6	H. M. Newhall & Co.	774	Cement.....	1,795 79
6	Julian B. Harries.....	775	Examining books	37 50
6	S. E. Slade Lumber Co.	776	Lumber.....	3,946 14
6	Rowlands & Loughton.....	777	Repairs.....	73 18
6	Swan, the Painter.....	778	Sign.....	7 50
6	Black Diamond Coal Mng. Co.	779	Coal.....	347 44
7	James H. O'Brien.....	780	Teams and carts	325 00
7	Mutual Electric Light Co.	817	Lights.....	1,343 30
7	P. F. Dundon's S. F. Iron Works.....	782	Repairs to dredger buckets.....	227 88

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rec. No.	On Account of.	Amount.
1902				
Aug. 7	Thomas Kelly	783	Recutting basalt blocks	\$30 00
9	Employés	784-797	Payroll for month of July	23,935 20
12	Smith Bros.	798	Two spars	50 00
14	W. J. Brady	799	Repairs	160 61
14	Boesch Lamp Co.	800	Repairing headlights	10 50
14	Betts Spring Co.	801	Springs for locomotive	25 50
14	Bancroft-Whitney Co.	802	California Reports	5 00
14	H. S. Crocker Co.	803	Stationery	78 44
14	Dunham, Carrigan & Hayden Co.	804	Hardware	55 84
14	Evening Post	805	Advertising	100 00
14	Guide Publishing Co.	806	Guides	10 50
14	W. T. Garratt & Co.	807	Repairs on tugs	18 15
14	Frank Greg	808	Sawdust	5 00
14	Gray Bros.	809	Rock	15 00
14	C. J. Hendry Co.	810	Chandlery	99 80
14	Holmes Lime Co.	811	Firebrick	15 72
14	J. Hedy Machine Wks.	812	Braces	13 00
14	G. M. Josselyn	813	Chain	74 35
14	Johnson-Locke Mercan- tile Co.	814	Paint	56 00
14	Marine Exchange	815	Reporting	25 00
14	Merchants' Exchange	816	Reporting	25 00
14	John W. Murphy	817	Keeping horses	23 00
14	H. H. Moore	818	Settees	119 70
14	C. C. Moore & Co.	819	Firebrick arch	8 85
14	H. M. Nagle	820	Brooms	8 00
14	O'Brien & Sons	821	Repairing buggy	161 70
14	Pacific States Tel. & Tel. Co.	822	Telephones	227 20
14	Geo. G. Rundle	823	Dredger poles, etc.	78 71
14	Sternfeld Leather Co.	824	Soap	12 00
14	Studebaker Bros.	825	Repairs sprinkler, etc.	87 60
14	Levi Strauss & Co.	826	Towel crash	6 25
14	Steiger & Kerr	827	Grate bars	57 25
14	Spring Valley Water Works	828	Water	254 11
14	Chas. A. Warren	829	Sand	50 00
14	Whittier-Coburn Co.	830	Oil	96 21
14	Yates & Co.	831	Paints, oil, etc.	210 05
13	C. G. Clinch & Co.	832	Oil	1 30
13	J. Anderson & Son	833	Repairing locks and keys	3 00
13	J. R. LaFontaine	834	Blueprints	5 25
13	Archie Pow	835	Teaming	4 77
13	Woodin & Little	836	Pipe	6 47
13	Bay City Engineering & Supply Co.	837	Packing	2 00
13	J. Wilder	838	Towing	23 50
13	J. C. Sala	839	Repairing transit	6 50
13	Hodge Draying Co.	840	Teaming	71 00
14	E. Peterson	841	Boat hire	1 87
14	Gorham Rubber Co.	842	Packing "Transpose"	5 00
14	Payne's Bolt Works	843	Bolts	8 04
14	Goodyear Rubber Co.	844	Hose, etc.	10 44
18	James Mathews	845	Washing for fire house	3 50
19	N. Clark & Sons	846	Sewer pipe	88
19	Atlantic, Gulf & Pacific Co.	*187	Dredging Channel St. (D. P. 48) ..	3,486 75
20	Darby Laydon	847	Repairing and repiling Pier No. 6 (Howard St. Wharf No. 2) ..	39 59
20	Darby Laydon	848	Repairing Sec. 1 & 2, Seawall ..	546 28
20	Robert Wakefield	849	Constructing Pier No. 25 (Green- wich St. Wharf No. 2) ..	4,423 65
31	State Treasurer	†856	Remittance	60,785 49
Total August, 1902				\$109,606 40

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1902				
Sept. 3	State Controller	857	S. F. Sinking Fund	\$4,631 00
3	Julian B. Harries	858	Extra work as accountant	75 00
3	H. R. Rood & Co.	859	Treating piles	2,884 00
3	S. D. LeClair	860	Repairing and repiling Pier No. 4	749 09
3	H. M. Newhall & Co.	861	Cement	3,206 21
3	Hyde Construction Co.	862	Constructing Pier No. 9	4,426 20
3	Robert Wakefield	863	Removing old piles at Fishermen's Wharf	243 00
5	Jas. H. O'Brien	+865	Teams and carts	325 00
6	Darby Laydon	866	Repairs with scow driver	977 65
10	Employes	867-881	Payroll for month of August	25,073 50
10	Mutual Elec. Light Co.	882	Lights	1,691 21
10	National Bank of D. O. Mills & Co.	883	Exchange	118 20
10	Spring Valley Water Works	884	Water	260 52
10	Black Diamond Coal Mng. Co.	885	Coal	336 66
10	The Examiner	886	Advertising	26 25
10	Evening Post	887	Advertising	7 50
10	S. F. Call	888	Advertising	16 80
10	California Iron Yards	889	Cut wire	588 00
10	City Front Stables	890	Keeping horses	91 60
10	T. J. Crowley	891	Horseshoeing	10 00
10	Flinn & Treacy	892	Blocks and gravel	278 75
10	Hatch Bros.	893	Office, Mission St. Wharf No. 1	800 00
10	City Street Imp. Co.	894	Paving Sansome St.	985 50
10	Williams, Dimond & Co.	895	Supplies, Belt Railroad	50 80
11	San Francisco Timber Preserving Co.	Vol. 28 *1923	Creosoting piles (D. P. 28)	7,559 06
11	Colored Citizens' Window and House Cleaning Co.	Vol. 29 896	Cleaning windows	20 00
11	A. R. Palmer	897	Piling lumber	5 65
12	Joseph Kane	898	Towing piles	80 00
16	James Mathews	899	Washing for fire house	3 50
17	S. F. Chronicle	900	Advertising	26 25
17	N. B. Turner	901	Blasting pile stumps	155 00
17	Jas. A. McMahon	902	Repairing spring line at Pacific St. Wharf	2,898 88
19	Jas. A. McMahon	903	Springs for fenders at Pacific St. Wharf	596 20
19	San Francisco Timber Preserving Co.	245	Creosoting piles for Union St. Wharf No. 1 (D. P. 52)	1,696 66
17	Robert Wakefield	904	Constructing Pier No. 25 (Greenwich St. Wharf No. 2)	2,527 80
22	Baker & Hamilton	905	Hardware	571 92
22	H. S. Crocker Co.	906	Stationery	26 70
22	Cunningham, Curtiss & Welch	907	Toilet paper	10 00
22	Conklin Bros.	908	Cleaning carpets	16 95
22	R. D. Chandler	909	Coal	632 64
22	Pacific Pine Co.	910	Piles	1,259 55
22	San Francisco Timber Preserving Co.	911	Creosoting piles	741 51
22	Gibson Soap Co.	912	Soap polish	18 00
22	W. & J. Sloane & Co.	913	Window shades	11 55
22	Frank Greg	914	Sawdust	5 00
22	Guide Publishing Co.	915	Guides	10 50
22	Merchants' Exchange	916	Reporting	25 00
22	Marine Exchange	917	Reporting	25 00
22	Studebaker Bros. Co.	918	Repairing sprinkler	29 20
22	J. Metcalfe	919	Lloyd's Register	24 00
22	H. M. Nagle	920	Brooms	8 00
22	Main & Winchester	921	Harness	21 75

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1902				
Sept. 22	Valvoline Oil Co.	922	Oil	\$32 83
22	C. G. Clinch & Co.	923	Paints, oil, etc.	86 12
22	Yates & Co.	924	Paints, oil, etc.	193 99
22	Chas. A. Warren	925	Sand	122 00
22	Cal. Electrical Works.	926	Electrical goods	39 50
22	C. J. Hendry Co.	927	Chandlery	301 14
22	W. T. Garratt & Co.	928	Repairs, Belt Railroad	4 50
22	Wm. J. Brady	929	Repairs	122 22
22	J. Hendy Machine Wks.	930	Repairs	50 01
22	Thomas Day Co.	931	Electrical fixtures	159 00
22	Geo. H. Fuller Desk Co.	932	Repairing chairs	3 00
22	Whittier-Coburn Co.	933	Oil	26 05
22	S. F. Towel Co.	934	Towel service	7 00
22	W. S. Phelps & Co.	935	Repairs	127 30
22	Standard Oil Co.	936	Oil	26 73
22	Geo. H. Tay Co.	937	Hardware	59 58
22	Payne's Bolt Works	938	Bolts	3 50
22	Main St. Iron Works	939	Repairs, Dredger No. 1.	106 22
22	Taylor & Pritchard	940	Repairs	5 40
22	Geo. E. Dow Pumping Engine Co.	941	Repairs	7 50
22	California Iron Works	942	Repairs, tug "Gov. Markham"	50 98
22	Columbia Machine Wks.	943	Repairs, Dredger No. 1	15 05
22	Olsen & Cook	944	Hardware	6 55
22	Holmes Lime Co.	945	Firebrick	4 75
22	G. M. Josselyn & Co.	946	Chain	124 50
22	Gorham Rubber Co.	947	Gaskets, etc.	22 80
22	Geo. F. Buswell	948	Frictions	60 00
22	Rowlands & Loughton	949	Repairs, Dredgers Nos. 1 and 2.	220 02
30	State Treasurer	950	Remittances	64,860 01
Total September, 1902.				\$133,706 96
Oct. 1	State Controller	951	S. F. Depot Sinking Fund	\$4,631 00
2	Healy, Tibbitts & Co.	*331	Repairing Channel St. Wharf (D. P. 54)	1,555 71
2	Darby Laydon	952	Repairs with scow driver	871 75
6	Hannah Bros.	953	Shed on Pier No. 19 (Union St. Wharf No. 2)	3,193 25
8	Jas. H. O'Brien	+955	Teams and carts	296 50
8	Robert Wakefield	3	Constructing Pier No. 19 (Union St. Wharf No. 2) (D. P. 31)	3,089 45
9	Dennet & Perry	956	Piling lumber	16 56
9	Wm. F. Thompson	957	Repairing jack	4 50
9	H. R. Rood & Co.	958	Preserving piles	2,805 20
9	San Francisco Timber Preserving Co.	959	Creosoting piles	2,551 20
9	S. E. Slade Lumber Co.	960	Lumber	4,866 85
9	Mutual Electric Light Co.	961	Electric lights	1,460 80
9	Baker & Hamilton	962	Hardware	1,215 83
9	John W. Murphy	963	Keeping horse	44 00
9	R. D. Chandler	964	Coal	759 55
9	Pacific Pine Co.	965	Piles	769 58
9	Black Diamond Coal Mng. Co.	966	Coal	445 42
9	Southern Pacific Co.	967	Repairing engine	624 70
9	Pac. States Tel. & Tel. Co.	968	Telephones	387 35
9	Evening Post	969	Advertising	105 00
9	S. F. Bulletin	970	Advertising	13 32
9	Guide Publishing Co.	971	Guides	10 50
9	U. S. Laundry Ass'n	972	Laundry	21 35
9	Chas. A. Warren	973	Sand	50 00
9	Merchants' Exchange	974	Reporting	25 00
9	Marine Exchange	975	Reporting	25 00
9	Robert Wakefield	976	Bolts, etc.	104 09

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1902				
Oct. 9	Engineers' Sup. Agency	977	Packing	\$29 89
9	Spring Val. Water W'ks	978	Water	273 86
9	Col'd Citizens' Window & House Cleaning Co.	979	Cleaning windows	40 00
10	Employés	980-1000	Payroll for September	24,351 50
10	James Cunningham	1001	Boat hire	3 00
11	James Young	1002	Mill work	811 90
15	Smith Bros	1003	One spar	25 00
16	Robert Wakefield	*397	Constructing Pier No. 21 (Filbert St. Wharf) (D. P. 58)	3,234 42
16	Hyde Construction Co.	1004	Rebuilding Pier No. 9 (Broadway Wharf No. 1)	3,448 18
16	Julian B. Harries	1005	Examining books	37 50
16	Call, Chronicle, and Examiner	+1010	Newspapers	5 85
18	James Mathews	1011	Washing for fire house	3 50
23	Yates & Co.	1012	Paints, oil, etc.	38 85
23	Gray Bros.	1013	Rock	26 25
23	O'Brien & Sons.	1014	Repairing buggy	49 00
23	City Front Stables	1015	Keeping horses	40 00
23	W. T. Garratt & Co.	1016	Repairs	3 25
23	T. J. Crowley	1017	Shoeing horses	10 00
23	Wm. J. Brady	1018	Repairing boiler	20 70
23	Flinn & Treacy	1019	Gravel	139 37
23	Cunningham, Curtiss & Welch	1020	Toilet paper	10 00
23	Cal. Electrical Works	1021	Electrical goods	53 71
23	H. S. Crocker Co.	1022	Books, stationery, etc.	75 18
23	Cal. Powder Works	1023	Powder	61 08
23	N. Clark & Sons	1024	Sewer pipe	18 82
23	Edward C. Hughes	1025	Briefs	102 70
23	Goodyear Rubber Co.	1026	Hose	21 87
23	C. J. Hendry Co.	1027	Chandlery	36 66
23	Main St. Iron Works	1028	Repairs	89 57
23	Langley & Michaels Co.	1029	Disinfectant	20 97
23	J. Hendy Machine Wks.	1030	Repairs	26 85
23	Johnson-Lecke Mer. Co.	1031	Paint	35 00
23	H. M. Nagle	1032	Brooms, etc.	17 52
23	S. P. Nelson & Co.	1033	Packing	34 06
23	Dunham, Carrigan & Hayden Co.	1034	Chain	15 00
23	Studebaker Bros.	1035	Repairs to sprinkler, etc.	56 00
23	Searey Furniture Co.	1036	Linoleum	10 50
23	Geo. G. Rundle	1037	Repairs, Dredger No. 1	26 25
23	Rowlands & Laughton	1038	Repairs	252 44
23	C. G. Clinch & Co.	1039	Paints, oils, etc.	57 54
23	Whittier-Coburn Co.	1040	Oil	11 40
23	Olsen & Cook	1041	Hardware	22 00
23	Boston Woven Hose and Rubber Co.	1042	Rubber	6 18
23	Geo. E. Dow Pumping Engine Co.	1043	Repairing pump, etc.	18 00
23	Payne's Bolt Works	1044	Bolts	4 65
23	Henry Blyth	1045	Repairs, Dredger No. 2	14 20
23	Frank Greg	1046	Sawdust	5 00
23	Healy, Tibbitts & Co.	*75	Repairing Ferry Slips Nos. 1, 5, 6, and 7 (D. P. 47)	1,708 05
22	Woodin & Little	1047	Hardware	5 25
22	Industrial Home for Adult Blind	1048	Brooms	22 80
22	San José Brick Co.	1049	Brick	2 35
22	Archie Pow	1050	Hauling lumber	107 00
22	J. C. Sala	1051	Repairing transit	2 00
22	S. F. Typewriter Exc'ge.	1052	Ribbon	1 00
22	Joseph Kane	1053	Towing piles	32 50

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1902				
Oct. 22	J. C. Lawless & Co.	1054	Repairing harness, etc.	\$3 00
24	Hodge Draying Co.	1055	Draying	32 90
		Vol. 28		
24	Robert Wakefield	*1387	Constructing Car Ferry Slips Nos. 1 and 2 (D. P. 5)	3,649 75
24	Robert Wakefield	Vol. 29		
		*745	Constructing Pier No. 23 (Green- wich St. Wharf No. 1) (D. P. 76)	3,221 74
27	W. R. King	1056	Services as plasterer	13 00
28	Paraffine Paint Co.	1057	Roofing	11 00
28	J. Braida	1058	Marble	3 00
28	Thos. Crowley & Bros.	1059	Towing piles	12 50
29	J. H. Bruce	1060	Constructing clamshell dredger ..	7,012 50
29	James Byrne, Jr.	1061	Petty cash expenses	148 80
31	State Treasurer	1062	Remittances	66,511 29
	Total October, 1902			\$146,137 06
Nov. 1	State Controller	1063	S. F. Depot Sinking Fund	\$4,631 00
3	Employés	1064-1078	Payroll, month of October	23,853 45
5	Darby Laydon	1079	Urgent repairs, October account ..	976 80
5	Robert Wakefield	1080	Constructing Pier No. 25 (Green- wich St. Wharf No. 2)	1,916 53
6	James H. O'Brien	†1097	Teams and carts	337 50
7	Fred Miller	*439	Constructing building on bulk- head between Piers 9 and 11 (D. P. 73)	1,846 75
10	S. E. Slade Lumber Co.	1098	Lumber	2,925 77
12	Sudden & Christensen	1099	Lumber	2,314 78
12	Chas. F. Doe & Co.	1100	Lumber	2,377 35
12	Mutual Elec. Light Co.	1101	Lights	1,661 22
12	National Bank of D. O. Mills & Co.	1102	Exchange	127 54
13	Lumber Surveyors' Ass'n	1103	Surveying lumber	13 95
13	Archie Pow	1104	Hauling lumber	32 06
13	J. Anderson & Son	1105	Repairing locks and keys	17 80
13	California Stevedore and Ballast Co.	1106	Sand	19 50
13	Chas. C. Cohen	1107	Flower piece	12 50
13	Evening Post	1108	Advertising	165 00
13	H. R. Rood & Co.	1109	Coating piles	1,080 00
13	Baker & Hamilton	1110	Hardware	795 21
13	R. D. Chandler	1111	Coal	734 47
13	City Front Stables	1112	Keeping horses	41 00
13	H. S. Crocker Co.	1113	Stationery	142 01
13	Black Diamond Coal Mng. Co.	1114	Coal	524 28
13	Cunningham, Curtiss & Welch	1115	Toilet paper	10 00
13	Guide Publishing Co.	1116	Guides	10 50
13	W. T. Garratt & Co.	1117	Repairs	65 35
13	Holbrook, Merrill & Stetson	1118	Hardware	115 61
13	C. J. Hendry & Co.	1119	Chandlery	143 48
13	Merchants' Exchange	1120	Reporting	25 00
13	Marine Exchange	1121	Reporting	25 00
13	John W. Murphy	1122	Keeping horse	36 35
13	Main St. Iron Works	1123	Repairing Dredger No. 2	20 71
13	H. M. Nagle	1124	Brooms	8 00
13	Wm. J. Brady	1125	Repairing tug and dredger	19 05
13	Boesch Lamp Co.	1126	Repairs, Belt Railroad	11 50
13	Pacific States Tel. & Tel. Co.	1127	Telephones	187 70
13	Rowlands & Laughton	1128	Repairs	41 14
13	Spring Valley Water Works	1129	Water	256 26

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rec't. No.	On Account of.	Amount.
1902				
Nov. 13	Standard Oil Co.	1130	Oil	\$40 78
13	James A. Snook & Co.	1131	Brushes	18 00
13	Pacific Pine Co.	1132	Piles	998 66
15	Municipal Loan Office.	1133	Rubber coat	2 00
15	Bishop's A B C Guide	1134	Guides	2 50
15	James Mathews	1135	Washing for fire house	3 50
15	California Mill Co.	1136	Mill work	30 35
15	Flinn & Treacy	1137	Sand	190 00
15	Holmes Lime Co.	1138	Lime	1 85
15	Woodin & Little	1139	Hardware	71 45
15	Geo. H. Tay Co.	1140	Hardware	76 05
15	J. C. Sala	1141	Repairing tape	35
15	Alex. Heins Belting Co.	1142	Cup leathers	47 50
17	Joseph Kane	1143	Towing piles	19 50
17	Yates & Co.	1144	Paints, etc.	46 00
17	Southern Pacific Co.	1145	Freight	75 30
17	Paraffine Paint Co.	1146	Roofing	22 00
17	Payne's Bolt Works	1147	Bolts	96 48
18	Thomas Crowley & Bros.	1148	Towing piles	11 00
19	Atlantic, Gulf & Pacific Co.	*188	Dredging Channel St.	3,486 75
19	C. G. Clinch & Co.	1149	Paints, oils, etc.	47 13
19	Chas. A. Warren	1150	Sand	30 00
21	Jacob Engelbert	1151	Services top driver	6 75
21	Novelty Sign Co.	1152	Wiring tower	822 00
26	Baker & Hamilton	1153	Hardware	815 39
26	Darby Laydon	1154	Approach to Stuart St. Wharf.	1,530 61
26	State Treasurer	+1157	Remittances	68,766 59
Total November, 1902				\$124,780 66
Dec. 1	State Controller	1158	S. F. Depot Sinking Fund	\$4,631 00
4	Darby Laydon	1159	Repairs with scow driver	671 57
5	S. E. Slade Lumber Co.	1160	Lumber	6,293 82
5	H. R. Rood & Co.	1161	Coating piles	1,840 00
5	C. F. Doe & Co.	1162	Lumber	1,377 18
6	Jas. H. O'Brien	1163	Teams and carts	287 50
9	Employés	1164-1176	Payroll, month of September	23,462 20
11	John Roach	1177	Diving and clearing bucket	35 00
11	Estate H. Dutard	1178	Pasturage	42 50
11	W. S. Ray Mfg. Co.	1179	Repairing stove	1 65
11	Yates & Co.	1180	Paints, oil, etc.	113 01
11	California Mill Co.	1181	Millwork	171 70
11	A. Zellerbach & Sons	1182	Paper	2 75
12	Archie Pow	1183	Teaming	58 32
12	San Francisco Type-writer Exchange	1184	Ribbon	1 00
12	Dunham, Carrigan & Hayden Co.	1185	Squeezers	2 70
12	J. Anderson & Son	1186	Springs for gates	15 00
12	Flinn & Treacy	1187	Gravel	207 50
12	Jas. Mathews	1188	Washing for fire house	3 50
12	C. G. Clinch & Co.	1189	Paints, oil, etc.	56 84
12	Southern Pacific Co.	1190	Repairs and freight	60 34
12	J. C. Sala	1191	Curves, Belt Railroad	30 00
12	Paraffine Paint Co.	1192	Paints, oil, etc.	14 00
12	W. W. Montague & Co.	1193	Reflectors	10 80
12	Hodge Draying Co.	1194	Drayage	24 75
12	N. Clark & Sons	1195	Sewer pipe	25 20
12	Payne's Bolt Works	1196	Bolts	3 53
12	Chas. A. Warren	1197	Sand	50 00
12	Joseph Kane	1198	Towing piles	3 50
12	Gray Bros.	1199	Rock	22 00
12	R. D. Chandler	1200	Coal	2,802 49
12	City Street Imp. Co.	1201	Lumber and piles	1,633 69

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date	Order.	Rec't. No.	On Account of.	Amount.
1902				
Dec. 12	Geo. F. Buswell	1202	Maple frictions	\$85 00
12	Black Diamond Coal Mng. Co.	1203	Coal	465 11
12	J. Browell	1204	Chimneys	44 25
12	Wm. J. Brady	1205	Repairing boiler	40 41
12	Bancroft-Whitney Co.	1206	California Reports	2 50
12	Baker & Hamilton	1207	Hardware	709 45
12	I. Willard Beam	1208	Wire rope	41 40
12	Boesch Lamp Co.	1209	Repairing headlights	3 75
12	Callahan Paint Co.	1210	Painting tug "Gov. Markham" ..	70 15
12	H. S. Crocker Co.	1211	Stationery, books, etc.	212 71
12	City Front Stables	1212	Keeping horses	45 00
12	Cal. Electrical Works	1213	Electrical goods	56 57
12	Geo. E. Dow Pumping Engine Co.	1214	Repairing pump	10 50
12	Mutual Elec. Light Co.	1215	Lights	1,571 27
12	S. E. Slade Lumber Co.	1216	Lumber	2,945 69
12	S. F. Timber Preserving Co.	1217	Creosoting piles	1,294 26
12	Pacific Pine Co.	1218	Piles	816 48
12	Pacific States Tel. & Tel. Co.	1219	Telephones	188 15
12	Spring Valley Water Works	1220	Water	288 50
12	Union Lumber Co.	1221	Repairing Folsom St. Wharf No. 1	459 30
12	G. M. Josselyn & Co.	1222	Chain	190 74
12	Murray Bros.	1223	Boiler	365 80
12	C. J. Hendry Co.	1224	Chandlery	217 05
12	Geo. C. Rundle	1225	Repairing dredgers	127 80
12	J. A. Snook & Co.	1226	Iron and steel	181 85
12	S. F. Dry Dock Co.	1227	Docking tug "Gov. Markham" ..	44 70
12	Levi Strauss & Co.	1228	Towel crash	6 84
12	Merchants' Exchange	1229	Reporting	25 00
12	Marine Exchange	1230	Reporting	25 00
12	John W. Murphy	1231	Horse hire	35 35
12	Main St. Iron Works	1232	Repairs on tug	13 08
12	Hyde Construction Co.	1233	Constructing Broadway Wharf No. 1	4,691 12
12	Gibson Soap Co.	1234	Soap polish	18 00
12	Guide Publishing Co.	1235	Guides	10 50
12	Garlock Packing Co.	1236	Packing	38 53
12	Gorham Rubber Co.	1237	Valves and gaskets	20 73
12	H. M. Newhall & Co.	1238	Cement	1,504 83
12	Rowlands & Laughton	1239	Repairing Dredger No. 2	39 33
12	Whittier-Coburn Co.	1240	Oil	43 44
12	Mutual Elec. Light Co.	1245	Lights	290 36
18	Bateman Bros.	1246	Constructing Union Depot	4,041 50
18	Frank Greg.	1247	Sawdust	5 00
18	Valvoline Oil Co.	1248	Oil	33 48
18	O'Brien & Sons	1249	Repairing buggies	26 60
18	Olsen & Cook	1250	Repairing tug and dredger	12 46
18	J. Hendy Machine Wks.	1251	Repairs, Belt Railroad	7 16
18	W. T. Garratt & Co.	1252	Repairs, "Gov. Markham"	8 20
19	S. F. Timber Preserving Co.	*246	Creosoting piles, Pier 17 (D. P. 53)	1,696 67
26	Hodge Draying Co.	1253	Drayage	27 75
26	Holbrook, Merrill & Stetson	1254	Hardware	49 15
26	C. G. Clinch & Co.	1255	Paints, oil, etc.	180 49
27	Dunham, Carrigan & Hayden Co.	1256	Hardware	118 64
27	Gordon & Little	1257	Hardware	6 60
27	James Mathews	1258	Washing for fire house	3 50
27	Yates & Co.	1259	Oil	2 30
27	C. C. Venn	1260	Whitewashing shed on Pier 23 ..	473 00

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1902				
Dec. 27	S. E. Slade Lumber Co.	1261	Lumber	\$2,079 72
27	Baker & Hamilton	1262	Hardware	437 88
29	Southern Pacific Co.	1263	Freight	17 50
29	N. Clark & Sons	1264	Sewer pipe	2 64
29	Plant Supply Co.	1265	Boiler compound	7 35
30	W. W. Montague & Co.	1266	Hardware	17 17
30	Payne's Bolt Works	1267	Bolts	14 69
30	W. A. Miller & Co.	1268	Oats	8 77
30	State Treasurer	1269	Remittances	67,488 22
Total December, 1902				\$137,961 98
1903				
Jan. 1	State Controller	1270	S. F. Depot Sinking Fund	\$4,631 00
2	Healy, Tibbitts & Co.	*332	Repairing wharf north side Chan- nel St. (D. P. 58)	1,555 71
8	Robert Wakefield	*41	Constructing Union St. Wharf No. 2 (D. P. 32)	3,089 45
8	Employés	1271-85	Payroll, month of December	23,282 00
9	Darby Laydon	1286	Urgent repairs, December account	1,048 78
10	Mutual Elec. Light Co.	1287	Lights	2,057 51
13	John Roach	1288	Removing piles	271 50
13	James H. O'Brien	1289	Teams and carts	325 00
14	Black Diamond Coal Mng. Co.	1290	Coal	866 50
16	Robert Wakefield	*398	Constructing Pier No. 21 (Filbert St. Wharf) (D. P. 59)	3,234 42
20	J. Delaney	1291	Services as switchman	15 00
22	J. Carter	1292	Boat hire	2 00
22	Robert Wakefield	1293	Powder	36 00
22	Uncle Sam's Workshop	1294	Ladders	19 60
26	James Byrne, Jr.	1295	Petty cash expenses	261 90
26	Wm. J. Brady	1296	Repairs	175 54
26	Britton & Rey	1297	Water front maps	80 00
26	J. Browell	1298	Chimney	24 50
26	I. Willard Beam	1299	Wire work	38 60
26	Betts Spring Co.	1300	Repairs, Belt Railroad	6 00
26	R. D. Chandler	1301	Coal	863 30
26	H. S. Crocker Co.	1302	Stationery	197 45
26	Cunningham, Curtiss & Welch	1303	Toilet paper	10 00
26	Cal. Electrical Works	1304	Electrical goods	60 73
26	Callahan Paint Co.	1305	Painting tug "Gov. Irwin"	67 70
26	T. J. Crowley	1306	Shoeing horses	15 00
26	City Front Stables	1307	Keeping horses	57 00
26	P. F. Dundon's San Francisco Iron Works	1308	Dredger bucket repaired	75 10
26	Geo. E. Dow Pumping Engine Co.	1309	Repairing tugs	175 85
26	Evening Post	1310	Advertising	82 50
26	L. Feldman & Co.	1311	Brooms, dusters, etc.	35 85
26	Gorham Rubber Co.	1312	Hose	47 75
26	Frank Greg	1313	Sawdust	5 00
26	Guide Publishing Co.	1314	Guides	10 50
26	E. M. Graney	1315	Horseshoeing	12 50
26	Garlock Packing Co.	1316	Packing	16 68
26	Julian B. Harries	1317	Experting books	37 50
26	Edward C. Hughes	1318	Printing brief	18 05
26	Merchants' Exchange	1319	Reporting	25 00
26	Marine Exchange	1320	Reporting	25 00
26	John W. Murphy	1321	Keeping horse	28 75
26	H. M. Nagle	1322	Mops and brushes	8 00
26	O'Brien & Sons	1323	Repairing buggy	22 80
26	Pac. States Tel. & Tel. Co.	1324	Telephones	374 49
26	Standard Oil Co.	1325	Oil	18 53

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1903				
Jan. 26	S. F. Dry Dock Co.	1326	Repairing tug "Gov. Irwin"	\$32 70
26	Jas. A. Snook & Co.	1327	Iron, etc.	135 50
26	Spring Valley Water Works	1328	Water	285 50
26	Geo. H. Tay & Co.	1329	Plumbing supplies	39 03
26	E. W. Tucker Co.	1330	Repairs, Belt Railroad	14 24
26	Whittier-Coburn Co.	1331	Oil	39 98
26	J. Halligan	1332	Newspapers	5 85
24	California Mill Co.	1333	Millwork	186 00
24	Robert Wakefield	Vol. 28 *1388	Constructing Car Ferry Slips 1 and 2 (D. P. 6)	3,649 75
24	Robert Wakefield	Vol. 29 * 746	Constructing Greenwich Street Wharf No. 1 (D. P. 77)	3,221 74
24	Holbrook, Merrill & Stet- son	1334	Hardware	16 20
24	Woodin & Little	1335	Hardware	20 66
24	Geo. E. Richards	1336	Binders	4 50
24	Flinn & Treacy	1337	Gravel	145 25
24	Archie Pow	1338	Teaming	26 05
24	San José Brick Co.	1339	Brick	6 50
24	Payne's Bolt Works	1340	Bolts	6 81
24	Hodge Draying Co.	1341	Draying	33 00
24	Henry Fautz	1342	Keys	1 25
24	James Young	1343	Millwork	23 85
26	W. T. Garratt & Co.	1344	Repairs to steam-gauge	1 50
27	Joseph Kane	1345	Towing piles	28 50
27	S. F. Towel Co.	1346	Towel service	7 00
28	Stephen Potter	1347	Typewriting	4 00
28	Chas. A. Warren	1348	Rock	33 00
28	Geo. P. Wetmore & Co.	1349	Rock	2 50
28	Pacific Towel Co.	1350	Towel service	3 00
30	Yates & Co.	1351	Oil	150 83
30	John P. Fitzpatrick	1352	Repairs to tug "Gov. Irwin"	76 00
30	State Treasurer	1353	Remittances	61,406 97
Total January, 1903				\$112,919 70
Feb. 1	State Controller	1354	S. F. Depot Sinking Fund	\$4,631 00
4	Darby Laydon	1355	Urgent repairs, January	979 05
5	Robert Wakefield	*1081	Constructing Pier 25 (Greenwich St. Wharf No. 2) (D. P. 104)	3,164 92
7	Fred Miller	* 440	Constructing a building on bulk- head bet. Piers 9 and 11 (D. P. 74)	1,846 75
6	Jas. H. O'Brien	1356	Teams and carts	329 50
9	Dundon Bridge and Con- struction Co.	1359	Repairing approach to Dry Dock wharves	1,797 97
9	City Street Imp. Co.	1360	Repairing Howard Street Wharf No. 2	2,296 85
9	Hyde Construction Co.	1361	Constructing Broadway Wharf No. 1	2,513 10
10	Employés	1362-75	Payroll, month of January	23,478 25
11	Black Diamond Coal Mng. Co.	1376	Coal	1,568 83
11	National Bank of D. O. Mills & Co.	1377	Exchange	129 07
13	Mutual Electric Light Co.	1378	Lights	1,877 95
16	James Mathews	1379	Washing for fire house	3 50
17	Robert Wakefield	1380	Creosoting piles	25 60
18	P. T. Browne	1381	Pillow slips for fire house	1 65
19	Atlantic, Gulf & Pacific Co.	*189	Dredging Channel St. (D. P. 50) ..	3,486 75
20	Darby Laydon	850	Repiling and repairing Howard St. Wharf No. 1 (D. P. 92)	2,219 43

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1903				
Feb. 20	Darby Laydon.....	*853	Repairing Sections 1 and 2, Sea-wall (D. P. 95)	\$1,479 34
18	H. R. Rood & Co.....	1382	Coating piles	2,895 20
26	Baker & Hamilton	1383	Hardware	559 70
26	R. D. Chandler	1384	Coal	733 77
26	C. G. Clinch & Co.....	1385	Paints, oils, etc.	172 07
26	H. S. Crocker Co.	1386	Stationery	40 20
26	Cunningham, Curtiss & Welch	1387	Toilet paper	10 00
26	Cal. Northwest'n Ry. Co.	1388	Repairs, Belt Railroad	32 75
26	P.F. Dundon's San Francisco Iron Works	1389	Repairs, Dredger No. 2	112 03
26	Geo. E. Dow Pumping Engine Co.....	1390	Repairs, tug "Gov. Irwin"	11 35
26	Evening Post	1391	Advertising	55 00
26	Guide Publishing Co.	1392	Guides	10 50
26	Garlock Packing Co.	1393	Packing	20 80
26	Gorham Rubber Co.	1394	Hose and packing	48 72
26	W. T. Garratt & Co.....	1395	Repairs	38 85
26	Hammond Lumber Co.	1396	Piles	510 60
26	J. Hendy Machine Wks..	1397	Brake shoes	21 53
26	John W. Murphy	1398	Keeping horse	26 00
26	Main St. Iron Works	1399	Repairs, tug "Gov. Irwin"	107 35
26	Merchants' Exchange ..	1400	Reporting	25 00
26	Marine Exchange	1401	Reporting	25 00
26	Pacific Coast Rubber Co.	1402	Hose	240 00
26	Rowlands & Laughton ..	1403	Repairs	17 70
26	Geo. G. Rundle	1404	Repairs, tug and dredgers	83 91
26	Dep't of State Printing ..	1405	Biennial reports	850 00
26	Studebaker Bros. Co.	1406	Sprinkling wagon No. 1	62 30
26	S. E. Slade Lumber Co.	1407	Lumber	2,057 75
26	Jas. A. Snook & Co.	1408	Brooms	10 50
26	Southern Pacific Co.	1409	Repairing Engine No. 2	672 28
26	Spring Valley Water Works	1410	Water	303 53
26	Geo. H. Tay Co.	1411	Plumbing supplies	6 00
26	U. S. Laundry Ass'n	1412	Washing	21 45
26	Vulcan Iron Works	1413	Repairs, ferry slip	90 00
26	Wm. D. English	1414	Expenses to Sacramento	17 75
26	H. R. Rood & Co.	†1419	Coating piles	1,999 40
26	Thos. Crowley & Bros.	1420	Towing piles	84 50
27	Pacific Refining and Roofing Co.....	1421	Repairing roof	27 00
27	W. S. Phelps & Co.....	1422	Repairing gangway, Clay St. Pier	231 90
27	J. R. Lafontaine	1423	Prints	10 00
27	San Francisco Type-writer Exchange	1424	Ribbon	1 00
27	Woodin & Little	1425	Hardware	15 98
27	Flinn & Treacy	1426	Gravel and paving blocks	607 05
27	Pac.Coast Wrecking Co.	1427	Rope	2 72
27	Henry Blyth	1428	Copper pipe	50 00
27	Hodge Draying Co.	1429	Teaming	42 54
27	Plant Supply Co.	1430	Boiler compound	7 35
28	T. E. Rock	1431	Repairing bridle	50
28	State Treasurer	1432	Remittances	60,911 53
	Total February, 1903.....			\$125,710 57
Mar. 1	State Controller	1433	S. F. Depot Sinking Fund	\$4,631 00
3	Steiger & Kerr	1434	Boxes	3 75
4	C. W. Carter	1435	Salvage on lumber	2 50
5	Darby Laydon	1436	Repairs with scow driver	1,056 20
5	Black Diamond Coal Mng. Co.	1437	Coal	982 35
5	Mutual Electric Light Co.	1438	Lights	1,563 93

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rec. No.	On Account of.	Amount.
1903				
Mar. 5	Colored Citizens' Win- dow and House Clean- ing Co.	1439	Cleaning windows	\$75 00
5	Paris Kilburn	1440	Expenses to Sacramento	16 50
5	Jas. H. O'Brien	1441	Teams and carts	292 00
6	Smith Bros.	1442	Two spars	50 00
10	Employés	1443-1456	Payroll, month of February	23,057 35
11	J. H. Bruce	1457	Constructing clamshell dredger	2,337 50
11	Alfred H. Post & Co.	+1461	Towing and drayage	323 35
11	S. E. Slade Lumber Co.	1462	Lumber	2,199 81
11	A. C. Dawson	+1469	Salvage on skiffs	2 00
12	James Mathews	1470	Washing for fire house	3 50
12	G. Marston	1471	Services on Dredger No. 3	29 35
13	Archie Pow	1472	Teaming	36 67
13	Murray Bros.	1473	Repairs	4 50
14	Colored Citizens' Win- dow and House Clean- ing Co.	1474	Cleaning windows	165 00
14	California Mill Co.	1475	Mill work	314 50
19	Baker & Hamilton	+1482	Hardware	1,489 16
19	Wm. J. Brady	1483	Repairs	457 70
19	Boston Woven Hose and Rubber Co.	1484	Hose	30 80
19	Geo. F. Buswell	1485	Frictions	25 00
19	Boesch Lamp Co.	1486	Globes	7 50
19	Cunningham, Curtiss & Welch	1487	Toilet paper	10 00
19	A. J. Coffee Co.	1488	Fog bell and apparatus	750 00
19	City Front Stables	1489	Keeping horses	132 50
19	H. S. Crocker Co.	1490	Stationery	59 22
19	Cal. Electrical Works	1491	Electrical supplies	70 10
19	R. D. Chandler	1492	Coal	556 84
19	Dunham, Carrigan & Hayden Co.	1493	Hardware	21 94
19	Geo. E. Dow Pumping Engine Co.	1494	Repairs, tug "Gov. Irwin"	24 00
19	P. F. Dundon's San Francisco Iron Works	1495	Repairing dredger buckets	1,026 23
19	C. F. Doe & Co.	1496	Lumber	2,776 51
19	Evening Post	1497	Advertising	165 00
19	L. Feldman & Co.	1498	Brushes	30 55
19	Dundon Bridge and Construction Co.	1499	Driving piles	166 67
19	Guide Publishing Co.	1500	Guides	10 50
19	Gorham Rubber Co.	1501	Hose	9 80
19	Frank Greg	1502	Sawdust	5 00
19	Gibson Soap Co.	1503	Soap polish	18 00
19	Garlock Packing Co.	1504	Packing	33 14
19	W. T. Garratt & Co.	1505	Repairs, etc.	36 35
19	Edward C. Hughes	1506	Printing	6 00
19	Marshall C. Harris	1507	Superintending construction of new dredger	800 00
19	C. J. Hendry Co.	1508	Chandlery	167 06
19	Judson Mfg. Co.	1509	Switch points	130 09
19	Merchants' Exchange	1510	Reporting	25 00
19	Marine Exchange	1511	Reporting	25 00
19	John W. Murphy	1512	Keeping horse	25 00
19	Main St. Iron Works	1513	Repairs	48 61
19	W. W. Montague & Co.	1514	Reflectors	61 55
19	H. M. Nagle	1515	Brooms	16 00
19	O'Brien & Sons	1516	Repairing buggy	12 75
19	Olsen & Cook	1517	Repairs	10 05
19	Pacific Coast Co.	1518	Coal	340 26
19	Pacific Pine Co.	1519	Piles	4,407 87

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1903				
Mar. 19	Pacific States Tel. & Tel. Co.	1520	Telephones	\$356 75
19	Geo. G. Rundle	1521	Dredger poles	50 00
19	Rowlands & Laughton	1522	Repairs	94 85
19	Southern Pacific Co.	1523	Repairs, belt railroad	35 40
19	Frank E. Smith & Co.	1524	Electrical supplies	70 00
19	Spring Valley Water Works	1525	Water	283 90
19	James A. Snook & Co.	1526	Brooms	5 95
19	Mathew Turner	1527	Extra work, new dredger	383 68
19	Geo. H. Tay Co.	1528	Plumbing supplies	11 25
19	Vulcan Iron Works	1529	Repairs	123 55
19	Vaivoline Oil Co.	1530	Oil	35 43
19	Whittier-Coburn Co.	1531	Oils	120 75
19	Chas. A. Warren	1532	Rock	137 50
19	Goodyear Rubber Co.	1533	Hose	9 09
19	John Roach	1534	Driving and blasting piles	90 00
20	J. Anderson & Son	1535	Repairs, locks and keys	17 90
21	C. G. Clinch & Co.	1536	Paints, oil, etc.	144 14
21	J. J. Havise Co.	1537	Smokestack guys	7 24
21	Payne's Bolt Works	1538	Bolts	46 82
21	W. S. Phelps & Co.	1539	Repairing slip	68 73
21	Neil O'Neill	1540	Repairing clock	1 50
21	Flinn & Treacy	1541	Rock and gravel	342 61
21	Thos. Crowley & Bros.	1542	Towing piles	36 00
21	Hodge Draying Co.	1543	Drayage	13 00
21	Paraffine Paint Co.	1544	Paint	8 00
21	Yates & Co.	1545	Paints, oil, etc.	87 45
21	Industrial Home for Adult Blind	1546	Brooms	22 80
21	Joseph Kane	1547	Towing piles	60 00
24	Plant Supply Co.	1548	Boiler compound	7 35
25	E. Peterson	1549	Boat hire	5 00
25	Robert Wakefield	1550	Repairing ferry slips between dolphins 4 and 5	2,316 52
25	H. R. Rood & Co.	1551	Coating piles	1,195 00
25	Betts Spring Co.	1552	Repairs	13 25
25	Golden States and Miners' Iron Works	1553	Repairs, Dredger No. 3	798 03
31	State Treasurer	*1558	Remittances	59,166 87
	Total March, 1903			\$117,300 62
Apr. 1	State Controller	1559	S. F. Depot Sinking Fund	\$4,631 00
2	S. E. Slade Lumber Co.	1560	Lumber	3,147 33
2	Evening Post	1561	Advertising	55 00
2	Healy, Tibbitts & Co.	*333	Repairing Channel St. Wharf (D. P. 56)	1,555 71
3	Jas. H. O'Brien	1562	Teams and carts	325 00
3	Robert Gibson	1563	Boat hire	3 00
3	Darby Laydon	1564	Urgent repairs for March	1,019 68
4	City Street Imp. Co.	*954	Removing rock near Steuart St. Wharf (D. P. 99)	2,350 00
8	Robert Wakefield	*5	Constructing Pier 19 (Union St. Wharf No. 2) (D. P. 33)	3,089 45
10	Employés	+1601-15	Payroll, month of March	23,605 55
11	Archie Pow	1616	Teaming	35 27
8	Hyde Construction Co.	1617	Constructing Broadway Wharf No. 1	1,675 40
8	California Northwestern Ry. Co.	1618		1,418 28
8	Black Diamond Coal Mng. Co.	1619	Coal	614 34
8	R. D. Chandler	1620	Coal	767 10
8	Mutual Elec. Light Co.	1621	Lights	1,689 45
15	Mercantile Towel Co.	1622	Towel service	4 00

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rec't. No.	On Account of.	Amount.
1903				
Apr. 16	James Mathews	1623	Washing for fire house.....	\$3 50
16	Robert Wakefield.....	*399	Constructing Pier 21 (Filbert St. Wharf) (D. P. 60)	3,234 42
16	Wheaton & Kalloch	1624	Legal expenses	2,009 35
16	Jas. Byrne, Jr.	1625	Petty cash expenses	144 00
16	Hyde Construction Co.	1626	Additional work Pier 9.....	310 05
17	Pacific Towel Co.	1627	Towel service.....	3 00
23	J. J. Halligan.....	1628	Newspapers	5 85
24	Robert Wakefield.....	Vol. 28 *1389	Constructing Car Ferry Slips 1 and 2 (D. P. 7).....	3,649 75
24	Robert Wakefield.....	Vol. 29 *747	Constructing Greenwich St. Wharf No. 1 (D. P. 78).....	3,221 74
27	Wm. H. Milestone.....	1629	Mattress.....	50
30	Smith Bros.	1630	One spar	25 00
30	G. O. Abrahamson.....	1631	Diving for fog bell.....	30 00
30	State Treasurer.....	1632	Remittances.....	67,116 48
Total April, 1903.....				\$125,739 20
May				
1	State Controller	1633	S. F. Depot Sinking Fund.....	\$4,631 00
1	California Mill Co.	1634	Millwork	506 55
1	Maritime World.....	1635	Subscription.....	3 00
5	Robert Wakefield.....	*1082	Constructing Greenwich St. Wharf No. 2 (D. P. 105).....	3,164 92
5	Darby Laydon.....	1636	Repairs with scow driver, April.....	1,168 76
7	Fred Miller.....	*441	Constructing building on bulkhead between Piers 9 and 11 (D. P. 75).....	1,846 75
11	Bancroft-Whitney Co.	1637	Law books	11 50
11	Boston Woven Hose and Rubber Co.	1638	Hose	320 00
11	Wm. J. Brady	1639	Repairs	94 82
11	J. Browell	1640	Patent chimney	20 00
11	Geo. F. Buswell.....	1641	Maple frictions	25 00
11	H. S. Crocker Co.	1642	Stationery, etc.....	249 37
11	Cunningham, Curtiss & Welch	1643	Toilet paper.....	10 00
11	R. S. Chapman	1644	Cellar pipes	153 30
11	City Front Stables.....	1645	Keeping horses	63 50
11	T. J. Crowley.....	1646	Shoeing horses	10 00
11	Thos. Day Co.	1647	Globes.....	9 00
11	Geo. E. Dow Pumping Engine Co.	1648	Repairing pumps	24 00
11	Dundon Bridge and Construction Co.	1649	Repairs	85 00
11	Fulton Engineering and Shipbuilding Works.....	1650	Repairs	186 19
11	Evening Post.....	1651	Advertising	125 00
11	Frank Greg.....	1652	Sawdust.....	5 00
11	Garlock Packing Co.	1653	Packing	46 56
11	Gorham Rubber Co.	1654	Packing	11 91
11	W. T. Garratt & Co.	1655	Valve.....	4 30
11	Guide Publishing Co.	1656	Guides	10 50
11	Goodyear Rubber Co.	1657	Hose	270 00
11	Golden State and Miners' Iron Works.....	1658	Repairs, Dredger No. 3.....	460 57
11	Julian B. Harries.....	1659	Experting books	37 50
11	Hay & Wright.....	1660	Extra work on mud scows	103 05
11	J. Hendy Machine Wks.	1661	Repairs on locomotive	23 75
11	C. J. Hendry Co.	1662	Chandlery	158 00
11	G. M. Josselyn & Co.	1663	Chain	192 46
11	Geo. W. Kneass.....	1664	Yawl	85 46
11	Langley & Michaels Co.	1665	Disinfectant.....	20 85
11	G. W. McNear.....	1666	Cement.....	36 75

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rec't. No.	On Account of.	Amount.
1903				
May 11	Merchants' Exchange ..	1667	Reporting	\$25 00
11	Wm. J. Martin	1668	Soap polish	15 00
11	Marine Exchange	1669	Reporting	25 00
11	John W. Murphy	1670	Keeping horse	25 50
11	H. M. Nagle	1671	Brooms	16 00
11	O'Brien & Sons	1672	Repairing buggy	17 75
11	Payne's Bolt Works	1673	Bolts	54 85
11	Pacific Pine Co.	1674	Piles	1,306 44
11	Pacific Coast Co.	1675	Coal	481 58
11	H. R. Rood & Co.	1676	Coating piles	779 75
11	Geo. G. Rundle	1677	Repairs	31 83
11	Rowlands & Loughton ..	1678	Repairs	181 48
11	J. A. Roebling Sons Co..	1679	Wire rope	16 33
11	S. F. Dry Dock Co.	1680	Docking tug "Gov. Markham" ..	60 00
11	Standard Oil Co.	1681	Oil	27 64
11	Jas. A. Snook & Co.	1682	Hardware	55 00
11	Levi Strauss & Co.	1683	Towels, etc.	17 67
11	Studebaker Bros.	1684	Repairs on sprinkler	56 42
11	Spring Valley W. Works ..	1685	Water	282 15
11	Southern Pacific Co.	1686	Use of engine	25 00
11	S. E. Slade Lumber Co. ..	1687	Lumber	2,634 95
11	Harry Unna Co.	1688	Dusters, brushes, etc.	67 72
11	Vulcan Iron Works	1689	Repairs on cylinder	57 95
11	L. E. White Lumber Co. ..	1690	Railroad ties	228 60
11	L. E. White Lumber Co. ..	1691	Redwood	31 82
11	Whittier-Coburn Co.	1692	Oil	52 51
11	Flinn & Treacy	1693	Paving-blocks	225 00
11	H. R. Rood & Co.	1694	Coating piles	2,810 93
11	Chas. A. Warren	1695	Rock and sand	164 50
11	Wm. Wolff & Co.	1696	Cement	27 50
11	Flinn & Treacy	1697	Paving	924 97
11	Mutual Elec. Light Co. ..	1698	Lights	1,554 22
8	Jas. Mathews	1699	Washing for fire house	3 50
9	Employés	1700-15	Payroll, month of April	23,689 50
13	Vellum Paper Co.	1716	Tracing paper	5 00
13	Tug "Annie"	1717	Towing pile-driver	7 50
13	Robert F. Crockard	1718	Hooks and ferrules	12 00
13	Thos. Crowley & Bros.	1719	Towing piles	20 50
13	Woodin & Little	1720	Hardware	13 42
13	Henry Fautz	1721	Keys	1 25
13	C. G. Clinch & Co.	1722	Paints, oil, etc.	269 64
13	W. S. Phelps & Co.	1723	Blacksmithing	8 40
13	P. L. Jones & Co.	1724	Repairs	12 25
13	E. Peterson	1725	Boat hire	7 50
13	Plant Supply Co.	1726	Boiler compound	7 35
13	Hodge Draying Co.	1727	Drayage	38 50
13	W. H. Davis	1728	Advertising	12 00
13	H. E. Skinner & Co.	1729	Revolver, etc.	12 40
13	Frank E. Smith & Co.	1730	Repairs	5 00
14	S. F. Typewriter Ex- change	1731	Ribbon	1 00
15	Joseph Kane	1732	Towing piles	26 50
15	Jas. H. O'Brien	1733	Teams and carts	325 00
16	W. S. Ray Mfg. Co.	1734	Repairs on stove	80
18	Industrial Home for Adult Blind	1735	Brooms	8 00
18	"Suisun City," Steamer ..	1736	Damages	16 00
19	John Anderson & Son	1737	Repairs locks and keys	16 45
20	Darby Laydon	*851	Repiling and repairing Howard St. Wharf No. 1 (D. P. 93)	2,219 43
20	Darby Laydon	*854	Repairing Sections 1 and 2, Sea- wall (D. P. 96)	1,479 34
25	Flinn & Treacy	*1415	Cement for constructing Pier 9 (D. P. 123)	2,344 93
28	Archie Pow	1738	Teaming	39 97

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1903				
May 27	Hyde Construction Co..	1739	Repairing approach to Broadway Wharf No. 1.....	\$1,524 30
27	H. R. Rood & Co.	1740	Coating piles for Spear St. Wharf	2,171 50
27	Flinn & Treacy	1741	Repairing Fishermen's break-water.....	2,450 00
27	Black Diamond Coal Mining Co.	1742	Coal	593 09
29	California Mill Co.	+1744	Millwork	194 10
29	H. G. Winham	1745	Services as carpenter.....	92 00
31	State Treasurer.....	1746	Remittances.....	59,980 52
	Total May, 1903.....			\$124,064 07
June 1	State Controller	1747	S. F. Depot Sinking Fund.....	\$4,631 00
4	Darby Laydon	1748	Repairs with scow driver.....	1,278 31
4	Golden State and Miners' Iron Works.....	1749	Clamshell bucket, Dredger No. 3..	2,500 00
4	G. A. Abrahamson	1750	Recovering dredger bucket.....	20 00
5	Mercantile Towel Co.	1751	Towel service	2 00
6	Jas. H. O'Brien	1752	Teams and carts	317 00
10	Employés	1753-68	Payroll, month of May	23,848 20
11	James Mathews	1769	Washing for fire house	3 50
10	Mutual Elec. Light Co.	1770	Lights	1,647 19
11	J. H. Bruce	*1458	Constructing clamshell dredger (D. P. 132).....	9,350 00
12	Western Union Tel. Co.	1771	Rental of clocks	30 48
15	Henry R. Worthington.....	1772	Wrench and ring	4 65
16	H. R. Rood & Co.	1773	Preserving piles	495 25
16	J. C. Sala	1774	Repairing transit	4 85
17	S. O. Pasquiuocco	1775	Hauling float and rent of ways..	12 00
22	Thos. H. Day's Sons	1776	Constructing building between Piers 7 and 9.....	3,056 25
22	Jas. A. McMahon	1777	Constructing additional cylinder between Slips 1 and 2.....	1,998 00
22	Jas. A. McMahon	1778	Foundation for upper deck landing between Slips 1 and 2.....	2,081 25
22	James Byrne, Jr.	1779	Petty cash expenses.....	199 92
22	H. R. Rood & Co.	1780	Coating piles	936 97
22	Tug "Annie"	1781	Towing Dredgers Nos. 1 and 2.....	90 00
22	Atchison, Topeka and Santa Fé Ry. Co.	1782	Repairing cars	19 62
22	Black Diamond Coal Mng. Co.	1783	Coal	587 66
22	I. Willard Beam	1784	Steel rope	68 11
22	Wm. J. Brady	1785	Repairs, Belt Railroad	12 50
22	Baker & Hamilton	1786	Hardware	2,176 41
22	R. D. Chandler	1787	Coal	1,485 48
22	Callahan Paint Co.	1788	Painting tug "Gov. Markham" ..	42 00
22	City Front Stables	1789	Boarding horses, and horse hire..	105 00
22	H. S. Crocker Co.	1790	Stationery	179 84
22	Cal. Electrical Works	1791	Electrical supplies	92 37
22	Cunningham, Curtiss & Welch	1792	Stationery	46 25
22	Evening Post	1793	Advertisement	66 00
22	Fulton Engineering and Shipbuilding Works..	1794	Repairing tug "Gov. Markham" ..	304 80
22	E. M. Graney	1795	Shoeing horses	10 00
22	Frank Greg	1796	Sawdust	5 00
22	Goodyear Rubber Co.	1797	Hose	11 57
22	Guide Publishing Co.	1798	Guides	10 50
22	Guide Publishing Co.	1799	Guides	10 50
22	W. T. Garratt & Co.	1800	Repairs	39 60
22	Golden State and Miners' Iron Works.....	1801	Repairs, Dredger No. 3.....	106 26
22	Garlock Packing Co.	1802	Packing	10 71
22	Gorham Rubber Co.	1803	Hose and packing	22 58

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1903				
June 22	C. J. Hendry Co.	1804	Chandlery, etc.	\$288 01
22	J. Hendy Machine Wks.	1805	Repairs	19 60
22	Hyde Construction Co.	1806	Lumber	116 83
22	Judson Mfg. Co.	1807	Supplies, Belt Railroad	154 16
22	Merchants' Exchange	1808	Reporting	50 00
22	Marine Exchange	1809	Reporting	50 00
22	McCormick Bros.	1810	Grate bars	62 88
22	Midvale Steel Co.	1811	Engine tires	181 75
22	John W. Murphy	1812	Keeping horse	25 00
22	Main St. Iron Works	1813	Repairs on tug	55 25
22	National Bank of D. O. Mills & Co.	1814	Exchange	124 32
22	O'Brien & Sons	1815	Repairing buggy	57 00
22	Olsen & Cook	1816	Repairs	33 92
22	Pacific Coast Co.	1817	Coal	269 23
22	Pac. States Tel. & Tel. Co.	1818	Telephones	355 35
22	Rowlands & Laughton	1819	Repairs on tugs and dredgers	318 55
22	Strong, Belden & Farr	1820	Premium on bond	80 00
22	Southern Pacific Co.	1821	Repairing engine	1,183 76
22	Standard Oil Co.	1822	Oil	18 70
22	S. F. Timber Preserving Co.	1823	Creosoting piles	750 66
22	Studebaker Bros.	1824	Repairing sprinklers	66 00
22	Spring Val. Water Wks.	1825	Water	541 29
22	Levi Strauss & Co.	1826	Bunting	14 40
22	S. F. Dry Dock Co.	1827	Docking tug "Gov. Markham"	30 90
22	S. F. Dry Dock Co.	1828	Rock for Central Basin	843 63
22	Geo. G. Rundle	1829	Repairs on tugs and dredgers	455 46
22	S. E. Slade Lumber Co.	1830	Lumber	3,616 92
22	Harry Unna Co.	1831	Electric lamps	250 23
22	U. S. Laundry Ass'n	1832	Laundry	20 20
22	Vulcan Iron Works	1833	Repairs	19 00
22	Valvoline Oil Co.	1834	Oil	33 80
22	Western Repair and Supply Co.	1835	Rope	52 94
22	West Coast Wire and Iron Works	1836	Gates	90 00
22	Chas. A. Warren	1837	Rock and sand	130 25
22	Whittier-Coburn Co.	1838	Paints, oil, etc.	85 59
22	Yates & Co.	1839	Oil, etc.	259 52
22	Williams, Dimond & Co.	1840	Cylinder cocks	8 00
22	Chas. F. Sloane Co.	1841	Electrical supplies	108 99
22	Cal. Mill Co.	1842	Mill work	98 90
20	Joe Cassidy	1843	Services as patcher	48 75
23	S. F. Typewriter Exchg.	1844	Ribbon	1 00
23	J. C. Sala	1845	Tape, etc.	2 75
23	J. R. Lafontaine	1846	Prints	12 35
23	Holbrook, Merrill & Stetson	1847	Valves	15 00
23	Elliott Draying and Teaming Co.	1848	Draying	6 00
23	Pacific Polish and Compound Co.	1849	Polishing powder	18 00
23	Woodin & Little	1850	Hardware	50 39
23	Henry Fautz	1851	Keys	1 50
23	Hodge Draying Co.	1852	Draying	18 50
23	L. E. Healy	1853	Teaming	37 32
23	Flynn & Treacy	1854	Gravel	77 00
23	Thos. Crowley & Bros.	1855	Towing piles	73 00
23	Geo. H. Tay Co.	1856	Hardware	15 25
23	Holmes Lime Co.	1857	Fire clay	1 75
23	E. Peterson	1858	Launch hire	5 00
23	C. G. Clinch & Co.	1859	Paints, oil, etc.	232 87
23	W. P. Fuller & Co.	1860	Lead and oil	9 75
23	C. A. McNeill	1861	Launch hire	26 25

EXHIBIT B—Continued.

DISBURSEMENTS, 1902-1903—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1903				
June 23	Alex. Heins Belting Co.	1862	Cap leathers	\$20 00
23	Joseph Kane	1863	Towing piles	36 00
23	Smith, Rice & Co.	1864	Splicing cable	7 50
24	J. A. Roebling Sons Co.	1865	Sockets	8 22
24	H. A. Moore	1866	Chains	5 00
25	S. F. Towel Co.	1867	Laundry	7 00
26	Mercantile Towel Co.	1868	Towel service	1 00
29	San José Brick Co.	1869	Brick	4 00
29	Industrial Home for Adult Blind	1870	Brooms	30 40
29	Gray Bros.	1871	Rock	45 50
29	Hyde Construction Co.	1872	Repiling and repairing approach to Pier 9	508 10
29	Darby Laydon	1873	Foundation for scale at Howard Street Wharf	150 00
29	State Treasurer	†1878	Remittances	70,766 17
	Total June, 1903			\$141,081 89
	Total for year			\$1,517,083 13

* Number of receipt for deferred payment draft.

† Missing numbers are receipts for deferred payment drafts. Numbers are entered when drafts are paid.

DISBURSEMENTS, 1903-1904.

Date.	Order.	Rect. No.	On Account of.	Amount.
1903				
July 1	Robert Wakefield	Vol. 28. *1390	Constructing Car Ferry Slips 1 and 2 (D. P. 8)	\$3,649 75
1	Robert Wakefield	*1391	do (D. P. 9)	3,649 75
1	Robert Wakefield	*1392	do (D. P. 10)	3,649 75
1	Robert Wakefield	*1393	do (D. P. 11)	3,649 75
1	Robert Wakefield	*1394	do (D. P. 12)	3,649 75
1	Robert Wakefield	*1395	do (D. P. 13)	3,649 75
1	Robert Wakefield	*1396	do (D. P. 14)	3,649 75
1	Robert Wakefield	*1397	do (D. P. 15)	3,649 75
1	Robert Wakefield	*1398	do (D. P. 16)	3,649 75
1	Robert Wakefield	Vol. 29. *6	Constructing Union St. Wharf No. 2 (D. P. 34)	3,089 45
1	Robert Wakefield	*7	do (D. P. 35)	3,089 45
1	Robert Wakefield	*8	do (D. P. 36)	3,089 45
1	Robert Wakefield	*9	do (D. P. 37)	3,089 45
1	Robert Wakefield	*10	do (D. P. 38)	3,089 45
1	Robert Wakefield	*11	do (D. P. 39)	3,089 45
1	Robert Wakefield	*12	do (D. P. 40)	3,089 45
1	Robert Wakefield	*13	do (D. P. 41)	3,089 45
1	Robert Wakefield	*14	do (D. P. 42)	3,089 45
1	Robert Wakefield	*15	do (D. P. 43)	3,089 45
1	Robert Wakefield	*16	do (D. P. 44)	3,089 45
1	Robert Wakefield	*400	Constructing Filbert St. Wharf (D. P. 61)	3,234 42
1	Robert Wakefield	*401	do (D. P. 62)	3,234 42
1	Robert Wakefield	*402	do (D. P. 63)	3,234 42
1	Robert Wakefield	*403	do (D. P. 64)	3,234 42
1	Robert Wakefield	*404	do (D. P. 65)	3,234 42
1	Robert Wakefield	*405	do (D. P. 66)	3,234 42
1	Robert Wakefield	*406	do (D. P. 67)	3,234 42
1	Robert Wakefield	*407	do (D. P. 68)	3,234 42
1	Robert Wakefield	*408	do (D. P. 69)	3,234 42
1	Robert Wakefield	*409	do (D. P. 70)	3,234 42
1	Robert Wakefield	*410	do (D. P. 71)	3,234 42
1	Robert Wakefield	*411	do (D. P. 72)	3,234 42

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Reet. No.	On Account of.	Amount.
1903				
July 1	Robert Wakefield.....	*748	Construct'g Greenwich St. Wharf No. 1 (D. P. 79).....	\$3,221 74
1	Robert Wakefield.....	*749	do (D. P. 80).....	3,221 74
1	Robert Wakefield.....	*750	do (D. P. 81).....	3,221 74
1	Robert Wakefield.....	*751	do (D. P. 82).....	3,221 74
1	Robert Wakefield.....	*752	do (D. P. 83).....	3,221 74
1	Robert Wakefield.....	*753	do (D. P. 84).....	3,221 74
1	Robert Wakefield.....	*754	do (D. P. 85).....	3,221 74
1	Robert Wakefield.....	*755	do (D. P. 86).....	3,221 74
1	Robert Wakefield.....	*756	do (D. P. 87).....	3,221 74
1	Robert Wakefield.....	*757	do (D. P. 88).....	3,221 74
1	Robert Wakefield.....	*758	do (D. P. 89).....	3,221 74
1	Robert Wakefield.....	*759	do (D. P. 90).....	3,221 74
1	Robert Wakefield.....	*760	do (D. P. 91).....	3,221 74
1	Robert Wakefield.....	*1083	Construct'g Greenwich St. Wharf No. 2 (D. P. 106).....	3,164 92
1	Robert Wakefield.....	*1084	do (D. P. 107).....	3,164 92
1	Robert Wakefield.....	*1085	do (D. P. 108).....	3,164 92
1	Robert Wakefield.....	*1086	do (D. P. 109).....	3,164 92
1	Robert Wakefield.....	*1087	do (D. P. 110).....	3,164 92
1	Robert Wakefield.....	*1088	do (D. P. 111).....	3,164 92
1	Robert Wakefield.....	*1089	do (D. P. 112).....	3,164 92
1	Robert Wakefield.....	*1090	do (D. P. 113).....	3,164 92
1	Robert Wakefield.....	*1091	do (D. P. 114).....	3,164 92
1	Robert Wakefield.....	*1092	do (D. P. 115).....	3,164 92
1	Robert Wakefield.....	*1093	do (D. P. 116).....	3,164 92
1	Robert Wakefield.....	*1094	do (D. P. 117).....	3,164 92
1	Robert Wakefield.....	*1095	do (D. P. 118).....	3,164 92
1	Robert Wakefield.....	*1096	do (D. P. 119).....	3,164 92
1	S. F. Timber Pres. Co....	*1155	Constructing Howard St. Wharf No. 2 (D. P. 120).....	2,787 97
1	S. F. Timber Pres. Co....	*1156	do (D. P. 121).....	2,787 97
1	Hannah Bros.	*1241	Constructing shed on Greenwich St. Wharf No 1 (D. P. 122).....	3,795 25
1	Hannah Bros.	*1242	do (D. P. 123).....	3,795 25
1	Hannah Bros.	*1243	do (D. P. 124).....	3,795 25
1	Hannah Bros.	*1244	do (D. P. 125).....	3,795 25
1	Flinn & Treacy	*1416	Cement used in constructing Pier 9 (D. P. 129).....	2,344 98
1	Flinn & Treacy	*1417	do (D. P. 130).....	2,344 98
1	Flinn & Treacy	*1418	do (D. P. 131).....	2,344 98
1	Hyde Construction Co..	*1565	Constructing Bro way Wharf No. 1 (D. P. 151).....	4,188 50
1	Hyde Construction Co..	*1566	do (D. P. 152).....	4,188 50
1	Hyde Construction Co..	*1567	do (D. P. 153).....	4,188 50
1	Hyde Construction Co..	*1568	do (D. P. 154).....	4,188 50
1	Hyde Construction Co..	*1569	do (D. P. 155).....	4,188 50
1	Hyde Construction Co..	*1570	do (D. P. 156).....	4,188 50
1	Hyde Construction Co..	*1571	do (D. P. 157).....	4,188 50
1	Hyde Construction Co..	*1572	do (D. P. 158).....	4,188 50
1	Hyde Construction Co..	*1573	do (D. P. 159).....	4,188 50
1	Hyde Construction Co..	*1574	do (D. P. 160).....	4,188 50
1	Hyde Construction Co..	*1575	do (D. P. 161).....	4,188 50
1	Hyde Construction Co..	*1576	do (D. P. 162).....	4,188 50
1	Hyde Construction Co..	*1577	do (D. P. 163).....	4,188 50
1	Hyde Construction Co..	*1578	do (D. P. 164).....	4,188 50
1	Hyde Construction Co..	*1579	do (D. P. 165).....	4,188 50
1	Hyde Construction Co..	*1580	do (D. P. 166).....	4,188 50
1	S. F. Dry Dock Co.	*1581	Constructing Dry Dock wharves (D. P. 167).....	1,560 30
1	S. F. Dry Dock Co.	*1582	do (D. P. 168).....	1,560 30
1	S. F. Dry Dock Co.	*1583	do (D. P. 169).....	1,560 30
1	S. F. Dry Dock Co.	*1584	do (D. P. 170).....	1,560 30
1	S. F. Dry Dock Co.	*1585	do (D. P. 171).....	1,560 30
1	S. F. Dry Dock Co.	*1586	do (D. P. 172).....	1,560 30

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1903				
July 1	S. F. Dry Dock Co.	*1587	Constructing Dry Dock wharves (D. P. 173)	\$1,560 30
1	S. F. Dry Dock Co.	*1588	do (D. P. 174)	1,560 30
1	S. F. Dry Dock Co.	*1589	do (D. P. 175)	1,560 30
1	S. F. Dry Dock Co.	*1590	do (D. P. 176)	1,560 30
1	S. F. Dry Dock Co.	*1591	do (D. P. 177)	1,560 30
1	S. F. Dry Dock Co.	*1592	do (D. P. 178)	1,560 30
1	S. F. Dry Dock Co.	*1593	do (D. P. 179)	1,560 30
1	S. F. Dry Dock Co.	*1594	do (D. P. 180)	1,560 30
1	S. F. Dry Dock Co.	*1595	do (D. P. 181)	1,560 30
1	S. F. Dry Dock Co.	*1596	do (D. P. 182)	1,560 30
1	S. F. Dry Dock Co.	*1597	do (D. P. 183)	1,560 30
1	S. F. Dry Dock Co.	*1598	do (D. P. 184)	1,560 30
1	S. F. Dry Dock Co.	*1599	do (D. P. 185)	1,560 30
1	S. F. Dry Dock Co.	*1600	do (D. P. 186)	1,560 30
1	Darby Laydon	*852	Repairing Howard No. 1 Wharf (D. P. 94)	2,219 43
1	Darby Laydon	*855	Repairing Sections No. 1 and No. 2 (D. P. 97)	1,479 35
1	S. D. LeClair	*864	Repairing Mission Street Wharf No. 2 (D. P. 98)	2,247 27
1	Jas. A. McMahon	*1006	Repairing Ferry Slip No. 2 (D. P. 100)	1,866 47
1	Jas. A. McMahon	*1007	do (D. P. 101)	1,866 47
1	Jas. A. McMahon	*1008	do (D. P. 102)	1,866 48
1	Jas. A. McMahon	*1009	do (D. P. 103)	1,866 48
1	City Street Imp. Co.	*1357	Repairing Howard No. 2 Wharf (D. P. 126)	3,269 01
1	City Street Imp. Co.	*1358	do (D. P. 127)	3,269 01
1	Dundon Bldg. & Con. Co.	*1463	Repairing Ferry Slip No. 2 (D. P. 135)	1,092 56
1	Dundon Bldg. & Con. Co.	*1464	do (D. P. 136)	1,092 56
1	Dundon Bldg. & Con. Co.	*1465	do (D. P. 137)	1,092 57
1	Dundon Bldg. & Con. Co.	*1466	do (D. P. 138)	1,092 57
1	Dundon Bldg. & Con. Co.	*1467	do (D. P. 139)	1,092 57
1	Dundon Bldg. & Con. Co.	*1468	do (D. P. 140)	1,092 57
1	Darby Laydon	*1554	Repairing Washington Street Wharf (D. P. 147)	1,095 38
1	Darby Laydon	*1555	do (D. P. 148)	1,095 38
1	Darby Laydon	*1556	do (D. P. 149)	1,095 39
1	Darby Laydon	*1557	do (D. P. 150)	1,095 39
1	Flinn & Treacy	*1743	Repairing Fishermen's Break- water (D. P. 187)	2,450 00
1	J. H. Bruce	*1459	New dredger (D. P. 133)	9,350 00
1	J. H. Bruce	*1460	do (D. P. 134)	9,350 00
1	J. H. Bruce	*1476	New mud scows (D. P. 141)	2,662 33
1	J. H. Bruce	*1477	do (D. P. 142)	2,662 33
1	J. H. Bruce	*1478	do (D. P. 143)	2,662 33
1	J. H. Bruce	*1479	do (D. P. 144)	2,662 33
1	J. H. Bruce	*1480	do (D. P. 145)	2,662 34
1	J. H. Bruce	*1481	do (D. P. 146)	2,662 34
1	J. D. Spreckels & Bros.	*1874	Collapsed coal bunkers, Howard St. Wharf No. 2 (D. P. 188)	5,834 18
1	J. D. Spreckels & Bros.	*1875	do (D. P. 189)	5,000 00
1	J. D. Spreckels & Bros.	*1876	do (D. P. 190)	5,000 00
1	J. D. Spreckels & Bros.	*1877	do (D. P. 191)	5,000 00
1	State Controller	*1879	S. F. Depot Sinking Fund	4,631 00
1	F. H. Masow	*1880	Erecting shed on Pier 9 (Broad- way Wharf No. 1) (D. P. 192)	3,499 17
1	F. H. Masow	*1881	do (D. P. 193)	3,499 17
1	F. H. Masow	*1882	do (D. P. 194)	3,499 17
1	F. H. Masow	*1883	do (D. P. 195)	3,499 17
1	F. H. Masow	*1884	do (D. P. 196)	3,499 16
1	F. H. Masow	*1885	do (D. P. 197)	3,499 16
9	Darby Laydon	1886	Repairs with scow driver	1,133 05

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rec. No.	On Account of.	Amount.
1903				
July 10	Employés	1887-1909	Payroll for month of June	\$28,221 35
10	John Burns	1910	Salvage on fender piles	1 00
10	S. D. LeClair	1911	Piles	110 28
15	Jas. H. O'Brien	1912	Carts and teams	325 00
15	James Mathews	1913	Washing for fire house	3 50
15	Evening Post	1914	Advertising	315 50
15	Mutual Elec. Light Co.	1915	Lights	1,458 72
15	Pacific Coast S. S. Co.	1916	Loss of merchandise, Broadway Wharf No. 1	2,345 75
15	Taylor & Brickley	1917	Whitewashing shed, Broadway Wharf No. 1	318 75
17	S. D. LeClair	*1918	Repairing Broadway Wharf No. 2 (D. P. 198)	3,143 20
17	S. D. LeClair	*1919	do (D. P. 199)	3,143 20
17	S. D. LeClair	*1920	do (D. P. 200)	3,143 20
17	S. D. LeClair	*1921	do (D. P. 201)	3,143 20
17	J. Anderson & Son	1922	Repairing locks, etc.	38 30
28	Pacific Towel Co.	1923	Towel service	3 00
8	Robert Wakefield	1924	Deferred payment draft No. 34 ..	3,089 45
8	Hyde Construction Co.	1925	Deferred payment draft No. 151 ..	4,188 50
16	Robert Wakefield	1926	Deferred payment draft No. 61 ..	3,234 42
25	Robert Wakefield	1927	Deferred payment draft No. 8 ..	3,649 75
25	Robert Wakefield	1928	Deferred payment draft No. 79 ..	3,221 74
25	S. F. Dry Dock Co.	1929	Deferred payment draft No. 167 ..	1,560 30
29	Jas. A. McMahon	1930	Repairing dolphins between Slips 1 and 2	1,766 45
29	Jas. A. McMahon	1931	Foundation for upper deck land- ing between Slips 1 and 2	693 75
29	Jas. A. McMahon	1932	Additional cylinder piers for dol- phin between Slips 1 and 2	666 00
29	Thos H. Day's Sons	1933	Building on bulkhead between Piers 7 and 9	1,018 75
29	Flinn & Treacy	1934	Paving Broadway Wharf No. 1 ..	1,591 92
29	S. E. Slade Lumber Co.	1935	Lumber	4,084 65
29	San José Brick Co.	1936	Brick	2 00
29	Call, Chronicle and Ex- aminer	1937	Newspapers	5 85
31	S. D. LeClair	1938	Extra work, Broadway Wharf No. 2	225 84
31	State Treasurer	1939	Remittances	84,663 36
	Total July, 1903			\$592,830 94
Aug. 1	State Controller	1940	S. F. Depot Sinking Fund	\$4,631 00
July 1	S. F. Dry Dock Co.	1941	Balance for constructing Dry Dock wharves, Central Basin ..	48,000 00
Aug. 6	James Byrne, Jr.	1942	Petty cash expenses	63 00
7	Employés	1943-57	Payroll for month of July	26,423 40
7	Jas. H. O'Brien	1958	Teams and carts	321 50
7	Darby Laydon	1959	Repairs with floating driver	1,057 36
12	Atchison, Topeka & Santa Fé Ry.	1960	Rails	38 44
12	G. F. Buswell	1961	Frictions	60 00
12	Baker & Hamilton	1962	Hardware	1,576 01
12	I. Willard Beam	1963	Rope and screen	160 72
12	Betts Spring Co.	1964	Repairs	15 50
12	Boesch Lamp Co.	1965	Lanterns and globes	24 50
12	Black Diamond Coal Co.	1966	Coal	979 55
12	Wm. J. Brady	1967	Repairs	189 57
12	J. Browell	1968	Chimneys	31 30
12	Cal. Jewell Filter Co.	1969	Sand	50 00
12	R. D. Chandler	1970	Coal	637 18
12	City Front Stables	1971	Keeping horses	53 50
12	Coffin Megeath Co.	1972	Paint	35 00
12	H. S. Crocker Co.	1973	Stationery	134 44

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1903				
Aug. 12	T. J. Crowley	1974	Shoeing horses	\$10 00
12	Cunningham, Curtiss & Welch	1975	Stationery	108 35
12	Chas. F. Doe & Co.	1976	Lumber	1,207 40
12	Geo. E. Dow Pumping Engine Co.	1977	Repairs	16 60
12	P. F. Dundon's San Francisco Iron Works	1978	Repairs	128 54
12	Flinn & Treacy	1979	Blocks and paving	644 53
12	Guide Publishing Co.	1980	Guides	10 50
12	Gorham Rubber Co.	1981	Gaskets	39 43
12	Gray Bros.	1982	Rock	110 00
12	Frank Greg.	1983	Sawdust	5 00
12	C. J. Hendry Co.	1984	Chandlery	49 81
12	J. Hendy Machine Wks.	1985	Repairs	52 48
12	Judson Mfg. Co.	1986	Beams	201 00
12	Langley & Michaels Co.	1987	Soap	7 56
12	Merchants' Exchange	1988	Reporting	50 00
12	G. W. McNear	1989	Cement	857 50
12	Wm. J. Martin	1990	Cleaning powder	15 00
12	Marine Exchange	1991	Reporting	50 00
12	Main St. Iron Works	1992	Repairs	16 95
12	John W. Murphy	1993	Keeping horses	50 00
12	H. M. Nagle	1994	Brooms	8 00
12	Novelty Sign Co.	1995	Gaskets	8 00
12	O'Brien & Sons	1996	Repairing buggy	11 75
12	Olsen & Cook	1997	Hardware	42 99
12	W. S. Phelps & Co.	1998	Repairs	310 90
12	Pacific Pine Co.	1999	Piles	463 32
12	Pacific Boiler Works	2000	Repairs	78 05
		Vol. 30		
12	Payne's Bolt Works	1	Bolts	133 21
12	Risdon Iron and Locomotive Works	2	Repairs	1,191 38
12	Rowlands & Laughton	3	Repairs	73 45
12	H. R. Rood & Co.	4	Coating piles	1,115 03
12	Geo. G. Rundle	5	Repairs	15 00
12	H. B. Schindler Co.	6	Repairs to sprinkler	69 10
12	Scott & Magner	7	Oats	10 00
12	Chas. F. Sloane Co.	8	Electric goods	33 75
12	W. & J. Sloane & Co.	9	Carpets, etc.	51 82
12	Smith, Rice & Co.	10	Repairing time ball	95 50
12	Southern Pacific Co.	11	Freight on engine	68 88
12	Sternfeld Leather Co.	12	Soap	12 00
12	Levi Strauss & Co.	13	Towels	21 27
12	Spring Valley W. Works.	14	Water	578 70
12	Geo. H. Tay Co.	15	Plumbing supplies	56 69
12	E. W. Tucker & Co.	16	Rings for piston rods	25 50
12	Harry Unna Co.	17	Sponges, mops, etc.	20 50
12	Valvoline Oil Co.	18	Oil	34 45
12	Chas. A. Warren	19	Sand	50 00
12	Western Repair and Supply Co.	20	Chandlery	150 62
12	Whittier-Coburn Co.	21	Oil	70 51
12	Woodin & Little	22	Pipe	77 50
12	Yates & Co.	23	Paints, oil, etc.	425 35
12	Darby Laydon	24	Repairing bulkhead between Piers 25 and 27	307 25
12	Jas. A. McMahon	25	Repairing dolphins between Slips 1 and 2	588 81
12	Conklin Bros.	26	Cleaning carpets	29 30
11	James Mathews	27	Washing for fire house	3 50
11	Jas. A. McMahon	28	Moving two houses	34 05
12	J. Geddes Co.	29	Metal polish	2 00
13	Mercantile Towel Co.	30	Towel service	1 00

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Recd. No.	On Account of.	Amount.
1903				
Aug. 13	H. Fautz	31	Repairs to keys, etc.	\$1 25
14	S. F. Typewriter Exchange	32	Ribbon	1 00
15	Lauren E. Healey	33	Teaming	66 37
15	Fairbanks, Morse & Co.	34	Repairs	14 50
15	W. T. Garratt & Co.	35	Stuffing box	50
15	Alex. Heinz Belting Co.	36	Cup leathers	33 00
15	Hodge Draying Co.	37	Draying	27 50
15	Goodyear Rubber Co.	38	Packing	1 26
15	Thos. Crowley & Bros.	39	Towing piles	42 50
15	J. R. Lafontaine	40	Prints	4 20
15	California Mill Co.	41	Mill work	164 30
19	Joseph Kane	42	Towing piles	17 50
19	Hickman & Masterson	43	Lumber	3,795 74
19	Mutual Elec. Light Co.	44	Lights	1,574 85
19	Hyde Construction Co.	45	Repairing Pacific Street Wharf	695 00
19	Robert Wakefield	46	Constructing Ferry Slip "A"	3,390 00
20	Holmes Lime Co.	47	Clay, etc.	15 75
24	N. Clark & sons	48	Pipe	4 46
31	State Treasurer	49	Remittances	68,778 62
Total August, 1903				\$173,010 05
Sept. 1	State Controller	50	S. F. Depot Sinking Fund	\$4,631 00
3	Vulcan Iron Works	51	Hydraulic hoists, Ferry Slip No. 1	1,509 75
3	Flinn & Treacy	52	Paving Pier No. 9	539 65
3	Taylor & Brickley	53	Whitewashing shed on Pier No. 9	106 25
8	George Ross	54	Repairing mud scow No. 1	2,271 50
4	Darby Laydon	55	Repairs with floating driver	396 32
10	Employees	56-59	Payroll for month of August	26,066 55
11	Jas. H. O'Brien	60	Teams and carts	329 50
Aug. 5	Robert Wakefield	71	Deferred payment draft No. 106	3,164 92
10	J. D. Sprinkels & Bros.	72	Deferred payment draft No. 183	5,834 88
25	Darby Laydon	73	Deferred payment draft No. 94	2,219 43
25	Darby Laydon	74	Deferred payment draft No. 97	1,479 35
25	S. D. LeClair	75	Deferred payment draft No. 195	3,143 20
26	Flinn & Treacy	76	Deferred payment draft No. 129	2,244 95
Sept. 17	J. H. Bruce	77	Deferred payment draft No. 133	9,350 00
17	Hannah Bros.	78	Deferred payment draft No. 122	3,795 25
21	James Mathews	79	Washing for fire house	3 59
22	Eng. "Annie"	80	Towing mud scows	77 50
23	Atlas Pipe Wrench Co.	81	Wrenches	6 12
23	Black Diamond Coal			
	Mng. Co.	82	Coal	1,724 28
23	Baker & Hamilton	83	Hardware	1,172 38
23	Bay City Engineering			
	and Supply Co.	84	Packing	65 08
23	Wm. J. Brady	85	Repairs	8 60
23	Betts Spring Co.	86	Repairs to springs	17 50
23	Boesch Lamp Co.	87	Repairs to headlights	5 00
23	H. S. Crocker Co.	88	Stationery	114 33
23	C. G. Clinch & Co.	89	Paints, oil, etc.	79 23
23	Cal. Northwestern Ry.			
	Co.	90	Use of cars	324 00
23	City Front Stables	91	Keeping and hire of horse	52 50
23	Charles Furniture Co.	92	Furniture	179 95
23	R. D. Chandler	93	Coal	1,460 81
23	Chas. F. Doe & Co.	94	Lumber	804 67
23	Geo. E. Dow Pumping			
	Engine Co.	95	Repairs	49 85
23	Geo. H. Fuller Desk Co.	96	Chairs, etc.	22 25
23	Golden State and Miners			
	Iron Works	97	Repairs	19 99
23	E. M. Graner	98	Shoeing horses	10 00
23	Guide Publishing Co.	99	Guides	21 00
23	W. T. Garratt & Co.	100	Brasses	16 45

EXHIBIT B—*Continued.*DISBURSEMENTS, 1903-1904—*Continued.*

Date.	Order.	Rect. No.	On Account of.	Amount.
1903				
Sept. 23	Gorham Rubber Co.	101	Packing	\$27 09
23	Holmes Lime Co.	102	Firebrick	24 50
23	J. Hendy Machine Wks.	103	Repairs	7 05
23	C. J. Hendry Co.	104	Grease	15 92
23	Hammond Lumber Co.	105	Piles	1,390 08
23	Hickman & Masterson	106	Lumber	7,433 89
23	Julian B. Harries	107	Experting accounts	37 50
23	G. M. Josselyn & Co.	108	Chain	71 40
23	Mutual Elec. Light Co.	109	Lights	1,737 79
23	J. Metcalfe	110	Lloyd's Register	24 00
23	J. W. Murphy Co.	111	Keeping horse	51 50
23	Marine Exchange	112	Reporting	25 00
23	Merchants' Exchange	113	Reporting	25 00
23	Wm. J. Martin	114	Martin's cleaner	15 00
23	Chas. C. Moore & Co.	115	Firebrick arch	8 60
23	Pacific Pine Co.	116	Piles	4,390 20
23	Pacific Rolling Mill	117	Rail braces	28 13
23	Pacific States Tel. & Tel. Co.	118	Telephones	538 70
23	Risdon Iron & Locomotive Works	119	Repairs	178 97
23	G. G. Rundle	120	Repairs	46 71
23	George Ross	121	Repairing mud scow No. 2	2,555 00
23	Rowlands & Laughton	122	Repairs	214 90
23	Southern Pacific Co.	123	Repairs and freight	259 82
23	Levi Strauss	124	Towel crash	6 00
23	Charles F. Sloane Co.	125	Electrical goods	47 44
23	Smith Rice Co.	126	Spars	61 00
23	H. B. Schindler Co.	127	Repairs on sprinklers	60 75
23	Spring Valley Water Works	128	Water	374 89
23	Taylor & Brickley	129	Whitewashing shed, Greenwich St. Wharf No. 2	200 25
23	Geo. H. Tay Co.	130	Plumbing supplies	129 40
23	Harry Unna Co.	131	Brooms, brushes, etc.	73 70
23	Vulcan Iron Works	132	Grates	13 78
23	Whittier-Coburn Co.	133	Oil	75 05
23	Williams, Dimond & Co.	134	Monitor injectors	114 52
22	Hodge Draying Co.	135	Draying	21 25
22	J. S. Snook & Co.	136	Scrapers	4 50
22	Progressive Window and House Cleaning Co.	137	Cleaning windows	175 00
22	Yates & Co.	138	Paints, oil, etc.	164 36
23	Joseph Kane	139	Towing piles	23 00
23	Lauren E. Healey	140	Teaming	60 86
23	S. F. Towel Co.	141	Towel service	7 00
23	Thos. Crowley Bros.	142	Towing piles	35 00
23	J. C. Sala	143	Repairing tape	35
24	Henry Fautz	144	Keys	1 00
24	Mercantile Towel Co.	145	Towel service	2 00
24	Flinn & Treacy	146	Blocks, etc.	369 70
24	Sanborn, Vail & Co.	147	Binding	75
26	Chas. A. Warren	148	Rock and sand	227 50
26	J. Anderson & Son	149	Repairing locks and keys	23 60
24	Robert Wakefield	150	Constructing Slip "A"	2,825 00
28	Gray Bros.	151	Rock	21 75
30	S. D. LeClair	152	Deferred payment draft No. 98	2,247 27
30	State Treasurer	153	Remittances	74,798 38
Total September, 1903.				\$174,709 62

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1903				
Oct. 1	State Controller	154	S. F. Depot Sinking Fund	\$4,631 00
7	Vulcan Iron Works	155	Hydraulic hoists	503 25
7	Lewis-Anderson - Foard Co.	156	Chandlery	1,065 76
7	White Bros.	157	Oak lumber	935 09
7	H. Crone	158	Use of ways for mud scows	753 50
5	Darby Laydon	159	Deferred payment draft No. 147	1,095 38
8	Robert Wakefield	160	Deferred payment draft No. 35	3,089 45
8	Hyde Construction Co.	161	Deferred payment draft No. 152	4,188 50
9	George Ross	162	Repairing barge No. 3	3,506 00
9	Employés	163-176	Payroll, month of September	25,275 90
15	Jas. A. McMahon	177	Deferred payment draft No. 100	1,866 47
16	Robert Wakefield	178	Deferred payment draft No. 62	3,234 42
22	City Street Imp. Co.	179	Addition Broadway Wharf No. 2	10,272 75
22	Hickman & Masterson	180	Lumber	4,008 95
22	E. B. & A. L. Stone	181	Cement	2,241 45
22	J. Hammond & Co.	182	Two flat cars	1,490 00
22	H. R. Rood & Co.	183	Coating piles	2,931 30
22	E. B. & A. L. Stone	184	Cement	656 32
22	Risdon Iron and Locomotive Works	185	Repairs to tug "Gov. Markham" and Dredger No. 2	2,907 01
22	Benj. Dallerup	186	Repairs to tug "Gov. Markham" and Dredger No. 2	7,362 56
22	George Ross	187	Repairing barge No. 4	2,381 00
22	Jas. A. McMahon	188	Constructing a shed on Greenwich St. Wharf No. 2 (D. P. 202)	1,841 88
22	Jas. A. McMahon	189	do (D. P. 203)	1,841 88
22	Jas. A. McMahon	190	do (D. P. 204)	1,841 88
22	Jas. A. McMahon	191	do (D. P. 205)	1,841 88
22	Jas. A. McMahon	192	do (D. P. 206)	1,841 87
22	Jas. A. McMahon	193	do (D. P. 207)	1,841 87
22	Jas. A. McMahon	194	do (D. P. 208)	1,841 87
22	Jas. A. McMahon	195	do (D. P. 209)	1,841 87
22	S. F. Dry Dock Co.	196	Deferred payment draft No. 168	1,560 30
23	Mutual Elec. Light Co.	197	Lights	1,670 22
23	Jas. H. O'Brien	198	Teams and carts	300 00
24	California Mill Co.	199	Millwork	82 50
27	California Mill Co.	200	Millwork	538 75
24	Robert Wakefield	201	Deferred payment draft No. 9	3,649 75
24	Robert Wakefield	202	Deferred payment draft No. 80	3,221 74
27	Baker & Hamilton	203	Hardware	372 53
27	Bancroft-Whitney Co.	204	Law books	16 50
27	Black Diamond Coal Mng. Co.	205	Coal	607 49
27	J. Browell	206	Chimneys	58 50
27	Geo. F. Buswell	207	Frictions	29 55
27	Bay City Engineering & Supply Co.	208	Packing	27 65
27	H. S. Crocker Co.	209	Stationery	118 76
27	Cal. Northwestern Ry. Co.	210	Rent of flat cars	156 00
27	C. G. Clinch & Co.	211	Paints, oil, etc.	92 74
27	City Front Stables	212	Keeping horses and horse hire	107 75
27	S. F. Chronicle	213	Advertising	577 50
27	City Street Imp. Co.	214	Repairing Broadway Wharf No. 2	11 97
27	H. Crone	215	Use of ways for scows	212 50
27	Cunningham, Curtiss & Welch	216	Stationery	109 65
27	R. D. Chandler	217	Coal	779 92
27	Thos. Day Co.	218	Electrical works	5 00
27	Chas. F. Doe & Co.	219	Lumber	1,327 17
27	Evening Post	220	Advertising	310 00
27	Gorham Rubber Co.	221	Hose	17 75
27	Guide Publishing Co.	222	Guides	10 50

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1903				
Oct. 27	Goodyear Rubber Co.	223	Hose	\$39 30
27	Lewis-Anderson-Foard Co.	224	Chandlery, etc.	284 26
27	Merchants' Exchange	225	Reporting	25 00
27	Marine Exchange	226	Reporting	25 00
27	Midvale Steel Co.	227	Tires	184 80
27	Murray Bros.	228	Repairs to pile-driver	154 65
27	National Bank of D. O. Mills & Co.	229	Exchange	141 43
27	H. M. Nagle	230	Brooms	8 00
27	Pacific Hardware and Steel Co.	231	Chain	24 95
27	Pacific States Tel. & Tel. Co.	232	Telephones	352 25
27	Rowlands & Laughton	233	Repairs to scows, etc.	1,076 21
27	Studebaker Bros. Mfg Co.	234	Repairs to sprinkler	7 75
27	Southern Pacific Co.	235	Repairs and freight	153 89
27	Jas. A. Snook & Co.	236	Plumbing supplies	39 55
27	Spring Valley Water Works	237	Water	310 95
27	Harry Unna Co.	238	Brushes, etc.	26 50
27	U. S. Laundry Ass'n.	239	Laundry	25 55
27	Valvoline Oil Co.	240	Oil	33 15
27	Vulcan Iron Works	241	Repairs	21 85
27	Western Repair and Supply Co.	242	Chandlery, etc.	1,590 52
27	White Bros.	243	Oak lumber	458 90
27	Yates & Co.	244	Paints, oil, etc.	349 75
27	California Mill Co.	245	Mill work	332 08
27	Joseph Kane	246	Towing piles	7 00
27	H. C. Ellis & Co.	247	Bran	1 00
27	W. Snow	248	Labor on tug "Gov. Irwin"	1 20
27	J. C. Sala	249	Repairing transit	15 00
28	Henry Fautz	250	Repairs to gates, etc.	4 50
28	Flinn & Treacy	251	Gravel	68 75
28	Lauren E. Healy	252	Teaming	36 74
28	Thos. Crowley & Bros.	253	Towing piles	33 00
28	J. R. Lafontaine	254	Prints	4 18
28	N. Clark & Sons	255	Sewer pipe	21 62
28	S. F. Typewriter Exc'ge	256	Ribbon	1 00
28	Chas. A. Warren	257	Sand	125 00
28	Alex. Heins Belting Co.	258	Cup leathers	20 00
28	Hodge Draying Co.	259	Draying	92 50
28	A. Leitz	260	Repairing barometer	7 50
28	Smith-Rice & Co.	261	Spar	25 00
28	Mercantile Towel Co.	262	Towel service	1 00
29	Jas. Mathews	263	Washing for fire house	3 50
29	California Mill Co.	264	Mill work	408 79
29	Jas. A. McMahon	265	Reconstructing Mission St. Wharf No. 2	8,013 75
31	State Treasurer	266	Remittances	78,296 08
Total October, 1903				\$207,962 15
Nov. 2	State Controller	267	S. F. Depot Sinking Fund	\$4,631 00
6	Risdon Iron and Locomotive Works	268	Repairing dredgers	4,362 22
6	Robert Wakefield	269	Deferred payment draft No. 107	3,164 92
10	Employés	270-286	Payroll, for month October	25,630 65
11	S. D. LeClair	287	Repairing Fremont St. Wharf	8,288 86
11	Robert Wakefield	288	Constructing Ferry Slip "A"	2,825 00
11	J. D. Spreckels & Bros.	289	Cement	974 13

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rec. No.	On Account of.	Amount.
1903				
Nov. 11	Taylor & Brickley.....	290	Shed on Greenwich St. Wharf No. 2.....	\$66 75
12	J. D. Spreckels & Bros..	291	Deferred payment draft No. 189..	5,000 00
12	Gray Bros.....	292	Rock.....	88 00
12	State Treasurer.....	293	Draft returned and canceled.....	88 60
19	Jas. H. O'Brien.....	294	Teams and carts.....	337 50
20	J. Anderson & Son.....	295	Keys, etc.....	15 45
20	Mercantile Towel Co.....	296	Towel service.....	1 00
20	Tug "Annie".....	297	Towing scows.....	20 00
20	Bancroft-Whitney Co..	298	Law books.....	4 00
20	J. Browel.....	299	Chimney.....	15 00
20	I. Willard Beam.....	300	Steel rope, etc.....	116 38
20	Black Diamond Coal Mng. Co.....	301	Coal.....	669 49
20	James Bryne, Jr.....	302	Petty cash expenses.....	395 30
20	Baker & Hamilton.....	303	Hardware.....	955 08
20	H. S. Crocker Co.....	304	Stationery.....	120 01
20	City Front Stables.....	305	Keeping horse, etc.....	52 50
20	Callahan Paint Co.....	306	Painting tug "Gov. Irwin".....	71 95
20	T. J. Crowley.....	307	Shoeing horses.....	15 25
20	Cunningham, Curtiss & Welch.....	308	Stationery.....	57 10
20	R. D. Chandler.....	309	Coal.....	855 50
20	Benj Dallerup.....	310	Repairing Dredger No. 2.....	86 16
20	Dunham, Carrigan & Hayden Co.....	311	Hardware.....	23 94
20	Geo. E Dow Pumping Engine Co.....	312	Repairing tugs.....	442 85
24	Evening Post.....	313	Advertising.....	65 00
24	Geo. H. Fuller Desk Co.	314	Settees.....	85 05
24	Guide Publishing Co..	315	Guides.....	10 50
24	Frank Greg.....	316	Sawdust.....	10 00
24	Gorham Rubber Co.....	317	Packing.....	8 83
24	Garlock Packing Co.....	318	Packing.....	82 43
24	Milton Heyneman.....	319	Desk and chair.....	25 40
24	Julian B. Harries.....	320	Experting accounts.....	37 50
24	Hammond Lumber Co..	321	Piles.....	1,047 00
24	Hickman & Masterson..	322	Lumber.....	3,120 01
24	P. L. Jones & Co.....	323	Repairs.....	19 00
24	Marine Exchange.....	324	Reporting.....	25 00
24	Merchants' Exchange..	325	Reporting.....	25 00
24	John W. Murphy.....	326	Keeping horses.....	50 00
24	Wm. J. Martin.....	327	Cleaning compound.....	15 00
24	MutualElectricLight Co.	328	Lights.....	1,897 31
24	Pacific Coast Co.....	329	Coal.....	150 62
24	Pacific Hardware and Steel Co.....	330	Chain.....	121 23
24	Pacific States Telephone & Telegraph Co.....	331	Telephones.....	182 55
24	H. R. Rood & Co.....	332	Coating piles.....	988 60
24	Risdon Iron and Loco- motive Works.....	333	Repairs, tug "Gov. Irwin".....	4,019 75
24	Rowlands & Laughton..	334	Repairs.....	204 20
24	Jas. A. Snook & Co.....	335	Hardware.....	160 34
24	Levi Strauss & Co.....	336	Flannel.....	4 46
24	Southern Pacific Co.....	337	Repairs and freight.....	203 49
24	S. F. Dry Dock Co.....	338	Docking tug "Gov. Irwin".....	62 85
24	Spring Valley Water Works.....	339	Water.....	254 05
24	E. W. Tucker & Co.....	340	Metal rings.....	47 52
24	Henry Unna Co.....	341	Brushes, duster, etc.....	74 99
24	Valvoline Oil Co.....	342	Oil.....	33 48
24	Western Fuel Co.....	343	Coal.....	72 69
24	Robert Wakefield.....	344	Repairs.....	125 79
24	Whittier-Coburn Co.....	345	Oil.....	104 01

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1903				
Nov. 24	Chas. A. Warren.....	346	Sand.....	\$120 00
24	Yates & Co.....	347	Paints, etc.....	423 61
24	Western Repair and Sup- ply Co.....	348	Chandlery.....	483 67
24	City Street Imp. Co.....	349	Constructing addition to Broad- way Wharf No. 2.....	3,424 25
24	E. B. & A. L. Stone Co.	350	Cement.....	747 15
24	Bishop's A B C Guide ..	351	Guides.....	2 50
25	James Mathews.....	352	Washing for fire house.....	3 50
25	Flinn & Treacy.....	353	Gravel.....	68 75
25	Jas. Wilder Co.....	354	Towing.....	32 50
25	George Ross.....	355	Repairs.....	8 80
25	Pacific Towel Co.....	356	Towel service.....	3 00
25	Thos. Crowley & Bros. Co	357	Towing piles.....	49 50
25	Alex. Heins Belting Co.	358	Cup leathers.....	1 80
25	Lauren E. Healy.....	359	Teaming.....	15 91
25	California Mill Co.....	360	Mill work.....	257 60
25	H. Fautz.....	361	Repairing keys.....	2 25
25	E. Peterson.....	362	Boat hire.....	15 00
25	Louis P. McCarty.....	363	Statistician.....	3 50
25	Flinn & Treacy.....	364	Deferred payment draft No. 130..	2,344 98
27	Call, Chronicle and Ex- aminer.....	365	Newspapers.....	6 75
27	Smith, Rice & Co.....	366	Two spars.....	50 00
27	S. D. LeClair.....	367	Towing piles.....	14 50
28	Joseph Kane.....	368	Towing piles.....	7 50
28	Hodge Draying Co.....	369	Draying.....	24 25
30	Industrial Home for Adult Blind.....	370	Brooms.....	22 80
30	C. G. Clinch & Co.....	371	White lead.....	1 63
30	San José Brick Co.....	372	Bricks.....	1 00
30	State Treasurer.....	373	Remittances.....	95,174 06
Total November, 1903				\$176,019 00
Dec. 1	State Controller.....	374	S. F. Depot Sinking Fund.....	\$4,631 00
3	S. F. Timber Preserving Co.....	375	Deferred payment draft No. 120..	2,787 97
7	Jas. A. McMahon.....	376	Reconstructing Pier No. 4.....	2,671 25
7	Jas. A. McMahon.....	377	Lumber for Pier No. 4.....	129 22
10	Hyde Construction Co.....	378	Repairing hay wharves.....	2,249 62
10	J. D. Spreckels & Bros..	379	Cement.....	324 70
10	Employés.....	380-93	Payroll, month of November.....	24,413 10
11	Robert Wakefield.....	394	Constructing Ferry Slip "A".....	2,260 00
11	Robert Wakefield.....	395	do (D. P. 210).....	2,825 00
11	Robert Wakefield.....	396	do (D. P. 211).....	2,825 00
11	Robert Wakefield.....	397	do (D. P. 212).....	2,825 00
11	Robert Wakefield.....	398	do (D. P. 213).....	2,825 00
11	Robert Wakefield.....	399	do (D. P. 214).....	2,825 00
11	Robert Wakefield.....	400	do (D. P. 215).....	2,825 00
11	Robert Wakefield.....	401	do (D. P. 216).....	2,825 00
11	Robert Wakefield.....	402	do (D. P. 217).....	2,825 00
11	Robert Wakefield.....	403	do (D. P. 218).....	2,825 00
11	Robert Wakefield.....	404	do (D. P. 219).....	2,825 00
11	Robert Wakefield.....	405	do (D. P. 220).....	2,825 00
11	Robert Wakefield.....	406	do (D. P. 221).....	2,825 00
11	Robert Wakefield.....	407	do (D. P. 222).....	2,825 00
11	Robert Wakefield.....	408	do (D. P. 223).....	2,825 00
11	Robert Wakefield.....	409	do (D. P. 224).....	2,825 00
11	Robert Wakefield.....	410	do (D. P. 225).....	2,825 00
11	S. D. LeClair.....	411	Repiling and repairing Fremont St. Wharf.....	2,762 95
12	J. H. Bruce.....	412	Deferred payment draft No. 134..	9,350 00
12	Dundon Bridge and Con- struction Co.....	413	Deferred payment draft No. 135..	1,092 56

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1903				
Dec. 12	Vulcan Iron Works.....	414	Hydraulic hoist at Slip "A".....	\$2,091 75
17	Jas. H. O'Brien	415	Teams and carts	304 50
17	Hannah Bros.	416	Deferred payment draft No. 123.....	3,795 25
17	J. H. Bruce	417	Deferred payment draft No. 141.....	2,662 33
19	Mutual Elec. Light Co.	418	Lights	1,925 07
19	Hickman & Masterson	419	Lumber	1,423 27
19	National Bank of D. O. Mills & Co.	420	Exchange	202 35
19	Risdon Iron and Loco- motive Works	421	Repairs dredgers, etc.	1,901 40
19	Mercantile Towel Co.	422	Towel service	1 00
22	Atchison, Topeka & Santa Fe Co.	423	Spur track	161 76
22	Wm. Brady	424	Repairs	8 50
22	Bay City Engineering and Supply Co.	425	Cup leathers, etc.	20 21
22	Boesch Lamp Co.	426	Repairs	3 00
22	Betts Spring Co.	427	Repairs	15 00
22	Baker & Hamilton	428	Hardware	226 82
22	H. S. Crocker Co.	429	Stationery	84 80
22	City Front Stables	430	Keeping horse and horse hire.....	52 50
22	Cunningham, Curtiss & Welch	431	Printing	67 50
22	Evening Post	432	Advertising	265 00
22	George H. Fuller Desk Co.	433	Settees	29 70
22	W. T. Garratt & Co.	434	Repairs	29 15
22	Garlock Packing Co.	435	Packing	69 68
22	Guide Publishing Co.	436	Guides	10 50
22	Hammond Lumber Co.	437	Lumber	714 48
22	Milton Heyneman-Mar- shall Co.	438	Stationery	11 50
22	J. Hendy Machine Wks.	439	Repairs	2 75
22	Marine Exchange	440	Reporting	25 00
22	Merchants' Exchange.....	441	Reporting	25 00
22	Mann & Wilson	442	Boiler insurance	100 00
22	John W. Murphy	443	Keeping horse	26 50
22	H. M. Nagle	444	Brooms	20 00
22	Plant Supply Co.	445	Boiler compound	27 70
22	Pacific States Tel. & Tel. Co.	446	Telephones	178 10
22	Rowlands & Laughton	447	Repairs	41 00
22	Spring Valley Water Co.	448	Water	340 40
22	Southern Pacific Co.	449	Repairs, Belt Railroad engine.....	104 41
22	Jas. A. Snook & Co.	450	Hardware	114 51
22	Chas. F. Sloane Co.	451	Electric supplies	140 13
22	Harry Unna Co.	452	Brooms, etc.	23 37
22	Western Repair and Supply Co.	453	Chandlery	400 23
22	Whittier-Coburn Co.	454	Oil	58 41
23	Hodge Draying Co.	455	Drayage	14 00
23	John Breuner Co.	456	Cushions, etc.	3 35
23	Sanborn, Vail & Co.	457	Binding	75
23	Yates & Co.	458	Paints, oil, etc.	321 63
23	Henry R. Worthington.....	459	Wrenches	2 75
23	Chas. A. McPhee.....	460	Piling lumber	25 20
23	T. Crowley & Bros. Co.	461	Towing	43 50
23	Chas. A. Warren	462	Sand	50 00
23	Gray Bros.	463	Rock	2 75
23	Chas. Waltz	464	Repairing safe	25 00
23	Payne's Bolt Works	465	Bolts	3 24
23	Smith, Rice & Co.	466	Spar	25 00
24	S. F. Typewriter Exc'ge	467	Repairs	8 70
24	Lauren E. Healy	468	Mill work	19 95

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rec. No.	On Account of.	Amount.
1903				
Dec. 30	Cal. Lumber and Mill Co.	469	Mill work	\$557 26
31	Darby Laydon	470	Deferred payment draft No. 148 ..	1,095 38
31	State Treasurer	471	Remittances	78,062 03
	Total December, 1903..			\$195,837 39
1904.				
Jan. 1	State Controller	472	S. F. Depot Sinking Fund	\$4,631 00
8	Wells, Fargo & Co.'s Bank, assignee of F. H. Masow	473	Deferred payment draft No. 192 ..	3,460 34
8	Wells, Fargo & Co.'s Bank, assignee of Rob- ert Wakefield	474	Deferred payment draft No. 37 ..	3,052 21
8	Wells, Fargo & Co.'s Bank, assignee Hyde Construction Co.	475	Deferred payment draft No. 154 ..	4,138 01
8	Wells, Fargo & Co.'s Bank, assignee of Jas. A. McMahon	476	Deferred payment draft No. 202 ..	1,818 17
8	C. E. McCarthy, assignee of Jas. A. McMahon ..	477	Deferred payment draft No. 102 ..	1,842 19
8	Wells, Fargo & Co.'s Bank, assignee of Rob- ert Wakefield	478	Deferred payment draft No. 64 ..	3,191 89
8	Defer'd Pay't Draft Acct.	479	Discount on draft No. 192	38 83
8	Defer'd Pay't Draft Acct.	480	Discount on draft No. 37	37 24
8	Defer'd Pay't Draft Acct.	481	Discount on draft No. 154	50 49
8	Defer'd Pay't Draft Acct.	482	Discount on draft No. 202	23 71
8	Defer'd Pay't Draft Acct.	483	Discount on draft No. 102	24 29
8	Defer'd Pay't Draft Acct.	484	Discount on draft No. 64	42 53
8	S. F. Dry Dock Co.	485	Deferred payment draft No. 170 ..	1,539 35
8	Defer'd Pay't Draft Acct.	486	Discount on draft No. 170	20 95
8	Wells, Fargo & Co.'s Bank, assignee of Rob- ert Wakefield	487	Deferred payment draft No. 82 ...	3,175 84
8	Defer'd Pay't Draft Acct.	488	Discount on draft No. 82	45 90
8	Wells, Fargo & Co.'s Bank, assignee of Rob- ert Wakefield	489	Deferred payment draft No. 11 ...	3,597 75
8	Defer'd Pay't Draft Acct.	490	Discount on draft No. 11	52 00
8	Wells, Fargo & Co.'s Bank, assignee of Rob- ert Wakefield	491	Deferred payment draft No. 109 ..	3,115 06
8	Defer'd Pay't Draft Acct.	492	Discount on draft No. 109	49 86
8	J. D. Spreckels & Bros. .	493	Deferred payment draft No. 191 ..	4,917 81
8	Defer'd Pay't Draft Acct.	494	Discount on draft No. 191	82 19
8	First National Bank of S. F., assignee of Flinn & Treacy	495	Deferred payment draft No. 187 ..	2,406 38
8	Defer'd Pay't Draft Acct.	496	Discount on draft No. 187	43 62
8	S. F. Timber Preserving Co.	497	Deferred payment draft No. 121 ..	2,736 03
8	Defer'd Pay't Draft Acct.	498	Discount on draft No. 121	51 94
8	Dundon Bridge and Construction Co.	499	Deferred payment draft No. 137 ..	1,069 82
8	Defer'd Pay't Draft Acct.	500	Discount on draft No. 137	22 75
8	Wells, Fargo & Co.'s Bank, assignee, Han- nah Bros.	501	Deferred payment draft No. 125 ..	3,713 11
8	Defer'd Pay't Draft Acct.	502	Discount on draft No. 125	82 14
8	J. H. Bruce	503	Deferred payment draft No. 143 ..	2,604 34
8	Defer'd Pay't Draft Acct.	504	Discount on draft No. 143	57 99
8	London and S. F. Bank, assignee of Darby Lay- don	505	Deferred payment draft No. 150 ..	1,069 73

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1904				
Jan. 8	Defer'd Pay't Draft Acct.	506	Discount on draft No. 150	\$25 66
8	Wells, Fargo & Co.'s Bank, assignee of F. H. Masow	507	Deferred payment draft No. 193 ..	3,416 72
8	Defer'd Pay't Draft Acct.	508	Discount on draft No. 193	82 45
8	Wells, Fargo & Co.'s Bank, assignee of Robert Wakefield	509	Deferred payment draft No. 38...	3,013 69
8	Defer'd Pay't Draft Acct.	510	Discount on draft No. 38	75 76
8	Wells, Fargo & Co.'s Bank, assignee Hyde Construction Co.	511	Deferred payment draft No. 155...	4,085 80
8	Defer'd Pay't Draft Acct.	512	Discount on draft No. 155	102 70
8	Wells, Fargo & Co.'s Bank, assignee of Jas. A. McMahon	513	Deferred payment draft No. 203 ..	1,795 20
8	Defer'd Pay't Draft Acct.	514	Discount on draft No. 203	46 68
8	Wells, Fargo & Co.'s Bank, assignee of S. D. LeClair	515	Deferred payment draft No. 199...	3,063 11
8	Def'd Paym't Draft Acct.	516	Discount on draft No. 199	80 09
8	C. E. McCarthy, assignee of James A. McMahon	517	Deferred payment draft No. 103...	1,818 92
8	Def'd Paym't Draft Acct.	518	Discount on draft No. 103	47 56
8	Wells, Fargo & Co.'s Bank, assignee of Robert Wakefield	519	Deferred payment draft No. 65...	3,151 57
8	Def'd Paym't Draft Acct.	520	Discount on draft No. 65	82 85
8	S. F. Dry Dock Co.	521	Deferred payment draft No. 171...	1,519 90
8	Def'd Paym't Draft Acct.	522	Discount on draft No. 171	40 40
8	Wells, Fargo & Co.'s Bank, assignee of Robert Wakefield	523	Deferred payment draft No. 12...	3,552 26
8	Def'd Paym't Draft Acct.	524	Discount on draft No. 12	97 49
8	Wells, Fargo & Co.'s Bank, assignee of Robert Wakefield	525	Deferred payment draft No. 83...	3,135 68
8	Def'd Paym't Draft Acct.	526	Discount on draft No. 83	86 06
8	Hyde Construction Co.	527	Repairing Hay wharf	749 88
8	Robert Wakefield	528	Deferred payment draft No. 36...	3,089 45
8	Hyde Construction Co.	529	Deferred payment draft No. 153...	4,188 50
9	Employés	530-543	Payroll for December, 1903.....	25,114 60
14	H. Brown	544	Horse	260 00
14	James H. Budd	545	Legal services	1,000 00
14	Vulcan Iron Works	546	Hydraulic hoist	697 25
14	Fred Miller	547	Addition to shed on Broadway Wharf No. 2	3,399 75
16	James A. McMahon	548	Deferred payment draft No. 101...	1,866 47
16	Robert Wakefield	549	Deferred payment draft No. 63...	3,234 42
25	California Mill Co.	550	Mill work	406 35
25	Louis Meyer	551	Painting smokestack	25 00
25	Jas. H. O'Brien	552	Teams and carts	325 00
27	W. A. Boole & Son	553	Repairing barges	382 04
27	Geo. F. Buswell	554	Frictions	50 00
27	Bay City Engineering and Supply Co.	555	Packing	5 52
27	Baker & Hamilton	556	Hardware	494 39
27	John Breuner Co.	557	Linoleum	39 35
27	Betts Spring Co.	558	Repairs	8 50
27	Clement Bennett	559	Reporting and transcribing	161 20
27	Black Diamond Coal Mng. Co.	560	Coal	1,865 38
27	John D. Spreckels	561	Advertising	324 00
27	City Front Stable	562	Keeping horse	52 50
27	H. S. Crocker Co.	563	Stationery	159 80

EXHIBIT B—Continued.

DISBURSEMENTS; 1903-1904—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1904				
Jan. 27	R. D. Chandler	564	Coal	\$1,195 09
27	Cunningham, Curtiss & Welch	565	Stationery	126 75
27	Dunham, Carrigan & Hayden Co.	566	Hardware	79 07
27	Evening Post	567	Advertising	315 00
27	E. M. Graney	568	Shoeing horse	10 00
27	Frank Greg	569	Sawdust	5 00
27	W. T. Garratt & Co.	570	Repairs	22 94
27	Guide Publishing Co.	571	Guides	10 50
27	Golden State and Miners' Iron Works	572	Repairs, Dredger No. 3.	159 46
27	Hickman & Masterson	573	Lumber	2,597 20
27	Hammond Lumber Co.	574	Piles	1,094 52
27	Milton Heynemann-Marshall Co.	575	Desks, etc.	65 65
27	J. Hendy Machine Wks.	576	Switch stands, etc.	92 00
27	Langley & Michaels Co.	577	Disinfectants	17 88
27	Marine Exchange	578	Reporting	25 00
27	Merchants' Exchange	579	Reporting	25 00
27	Wm. J. Martin	580	Martin's cleaner	15 00
27	Mutual Elec. Light Co.	581	Lights	2,174 91
27	J. J. Maginis	582	Reporting	20 00
27	H. M. Nagle	583	Brooms	37 50
27	Leary Bros.	584	Keeping horse	41 50
27	Olsen & Cook	585	Hardware	72 19
27	Pacific Coast Rubber Co.	586	Canvas, etc.	28 75
27	W. R. Pond	587	Cleaning compound	137 23
27	The Plant Supply Co.	588	Boiler compound	60 53
27	The Pacific Coast Co.	589	Coal	35 03
27	Pacific States Tel. & Tel. Co.	590	Telephones	177 40
27	Risdon Iron and Locomotive Works	591	Shafts and journals	829 00
27	Risdon Iron and Locomotive Works	592	Repairs	58 25
27	Geo. G. Rundle	593	Repairing tug "Gov. Irwin"	1,416 22
27	Rowlands & Laughton	594	Repairs	118 38
27	J. A. Snook & Co.	595	Hardware	141 44
27	Southern Pacific Co.	596	Freight	73 67
27	Chas. F. Sloane & Co.	597	Electric goods	35 51
27	Henry B. Schindler Co.	598	Buggy	200 00
27	Spring Valley Water Co.	599	Water	307 30
27	E. W. Tucker & Co.	600	Metal rings	25 50
27	Harry Unna Co.	601	Brooms, brushes, etc.	41 05
27	U. S. Laundry Ass'n	602	Laundry	26 20
27	Vulcan Iron Works	603	Weights, Slip "A"	99 07
27	Valvoline Oil Co.	604	Oil	38 13
27	Western Fuel Co.	605	Coal	1,115 71
27	Western Repair and Supply Co.	606	Chandlery	262 28
27	Whittier-Coburn Co.	607	Oil	16 30
27	S. F. Dry Dock Co.	608	Deferred payment draft No. 169	1,560 30
25	Robert Wakefield	609	Deferred payment draft No. 10	3,649 75
25	Robert Wakefield	610	Deferred payment draft No. 81	3,221 74
25	Fred Miller	611	Extra work on Pier 11	164 90
28	J. J. Neylan	612	Spar	25 00
28	Lauren E. Healy	613	Teaming	6 10
28	J. Browell	614	Chimneys	44 00
28	Hodge Draying Co.	615	Draying	94 50
28	Darby Laydon	616	Repiling and repairing Piers 14 and 16	2,226 36
28	S. S. P. Weighing Co.	617	Weighing	9 90
28	Henry Fautz	618	Keys and repairs	3 25
28	Flinn & Treacy	619	Gravel	68 75

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1904				
Jan. 28	Thos. Crowley & Bros.	620	Towing	\$37 50
28	Getz Bros. & Co.	621	Soap, etc.	9 65
28	Henry A. Patterson	622	Draying	5 99
28	Pacific Towel Co.	623	Towel service	3 00
29	John Roach	624	Blasting piles	30 00
29	E. B. Heinrich	625	Repairing motor	7 25
29	San Francisco Towel Co.	626	Towel service	7 00
29	Chas. C. Moore & Co.	627	Repairing pump	1 20
29	Western Union Tel. Co.	628	Rental of clock	6 30
29	Yates & Co.	629	Paints, oil, etc.	298 21
31	Call, Chronicle and Examiner	630	Newspapers	6 75
31	Chas. A. Warren	631	Sand	50 00
31	State Treasurer	632	Remittances	68,715 03
Total January, 1904				\$223,722 90
Feb. 1	State Controller	633	S. F. Depot Sinking Fund	\$4,631 00
4	City Street Imp. Co.	634	Deferred payment draft No. 126	3,269 01
5	Robert Wakefield	635	Deferred payment draft No. 108	3,164 92
9	Employés	636-650	Payroll, month of January	25,174 85
12	John D. Spreckels & Bros.	651	Deferred payment draft No. 190	5,000 00
23	E. Raymond	652	Salvage on piles	5 00
23	Jas. H. O'Brien	653	Teams and carts	312 50
18	Healy, Tibbitts & Co.	654	Constructing an addition to Little Main St. Wharf	14,922 75
18	Fred Miller	655	Constructing an addition to shed, Broadway Wharf No. 2	1,133 25
24	Mutual Elec. Light Co.	656	Lights	2,017 53
24	Darby Laydon	657	Repairs	125 24
24	H. R. Rood & Co.	658	Treating piles	516 05
24	Boesch Lamp Co.	659	Globes, etc.	3 00
25	Bancroft-Whitney Co.	660	Reports, etc.	6 50
25	Geo. F. Buswell	661	Frictions	70 00
25	Betts Spring Co.	662	Repairs, Belt Railroad	5 50
25	Baker & Hamilton	663	Hardware	357 79
25	Bay City Engineering and Supply Co.	664	Cup leathers, etc.	32 61
25	Black Diamond Coal Mng. Co.	665	Coal	896 01
25	H. S. Crocker Co.	666	Stationery	89 00
25	City Front Stables	667	Keeping horse, etc.	62 90
25	T. J. Crowley	668	Shoeing horse	10 00
25	R. D. Chandler	669	Coal	575 05
25	Columbia Machine Wks.	670	Gasket	11 50
25	Cunningham, Curtiss & Welch	671	Dockage books	104 50
25	Dunham, Carrigan & Hayden Co.	672	Chain	15 85
25	Geo. E. Dow Pumping Engine Co.	673	Valve springs	4 80
25	Thos. Day Co.	674	Electric lights	50 00
25	Evening Post	675	Advertising	105 00
25	Getz Bros. & Co.	676	Soap, lye, etc.	16 63
25	Guide Publishing Co.	677	Guides	10 50
25	Frank Greg	678	Sawdust	5 00
25	W. T. Garratt & Co.	679	Trip handles, etc.	5 80
25	Milton Heynemann-Marshall Co.	680	Stationery, etc.	113 00
25	Holmes Lime Co.	681	Lime and plaster	5 00
25	Hammond Lumber Co.	682	Piles	1,935 24
25	Hickman & Masterson	683	Lumber	2,545 64
25	J. Hendy Machine Wks.	684	Brake shoes	18 83
25	Lewis-Anderson-Foard Co.	685	Rebate dockage	119 25

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rec. No.	On Account of.	Amount.
1904				
Feb. 25	Leary Bros.	686	Keeping horses	\$35 00
25	Langley & Michaels Co.	687	Disinfectants	46 39
25	Marine Exchange	688	Reporting	25 00
25	Merchants' Exchange	689	Reporting	25 00
25	H. M. Nagle	690	Brooms	14 60
25	J. O. Kane	691	Harness, etc.	58 00
25	Pacific Coast Rubber Co.	692	Hose, etc.	94 05
25	Plant Supply Co.	693	Packing	19 03
25	Pacific Hardware and Steel Co.	694	Wire cable	7 90
25	Pacific States Tel. & Tel. Co.	695	Telephones	176 35
25	Risdon Iron and Loco- motive Wks.	696	Repairs on dredgers	101 77
25	Rowlands & Laughton	697	Repairs on dredgers	105 47
25	J. A. Snook & Co.	698	Hardware	358 81
25	Henry B. Schindler Co.	699	Repairs	67 45
25	Sternfeld Leather Co.	700	Soap	12 00
25	Southern Pacific Co.	701	Repairs to Engine No. 2	1,627 34
25	Spring Valley Water Co.	702	Water	297 60
25	Sanborn, Vail & Co.	703	Picture frames	100 50
25	Harry Unna Co.	704	Cuspidors, brushes, etc.	227 39
25	Valvoline Oil Co.	705	Oil	4 00
25	Whittier-Coburn Co.	706	Oil	80 98
25	Western Fuel Co.	707	Coal	726 73
25	Williams, Dimond & Co.	708	Steam chest cap	14 00
25	Western Repair and Supply Co.	709	Hardware	275 94
25	Wells, Fargo & Co.	710	Expressage	45 90
25	Jas. Wilder Co.	711	Towing driver	20 00
25	James Mathews	712	Washing for fire house	7 00
25	Yates & Co.	713	Paints, oil, etc.	269 04
25	P. H. Murphy	714	Repairing roof, etc.	97 43
25	H. Fautz	715	Keys, etc.	3 25
25	Industrial Home for Adult Blind	716	Brooms	22 80
25	Mer. Towel Supply Co.	717	Towel service	1 00
25	Thos. Crowley & Bros.	718	Towing	31 00
25	Flinn & Treacy	719	Repairing pavement	188 25
25	Harry Worthington	720	Piston ring	3 65
25	S. Marcugo	721	Cleaning windows	18 00
25	J. David West	722	Repairing hammers	1 50
25	Standard Public Weigh- ing Co.	723	Weighing	1 07
26	Elliott Draying and Teaming Co.	724	Teaming	73 18
26	Fred Jacobsen	725	Repairing halyards	10 00
26	Flinn & Treacy	726	Deferred payment draft No. 131	2,344 98
27	Hodge Draying Co.	727	Teaming	4 00
29	State Treasurer	728	Remittance	66,288 32
	Total February, 1904			\$141,380 67
Mar. 1	State Controller	729	S. F. Depot Sinking Fund	\$4,631 00
5	J. B. Dalziel	730	Veterinary services	3 00
5	Darby Laydon	731	Repairing and repiling outer ends of Piers 14 and 16	742 12
9	Robert Wakefield	732	Deferred payment draft No. 210	2,825 00
10	Employés	733-46	Payroll, month of February	25,278 75
15	Healy, Tibbitts & Co.	747	Extending north wing of Slip "A"	1,039 92
11	Dundon Bridge and Con- struction Co.	748	Deferred payment draft No. 136	1,092 56
21	Robert Greigg	749	Slate roof on Ferry Building	995 00
21	R. D. Chandler	750	Coal	528 33
21	Hickman & Masterson	751	Lumber	2,237 53

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1904				
Mar. 21	Hammond Lumber Co.	752	Piles	\$1,153 56
21	National Bank of D. O. Mills & Co.	753	Exchange	139 60
21	Western Fuel Co.	754	Coal	797 43
21	Julian B. Harries	755	Experting accounts	37 50
21	H. R. Rood & Co.	756	Coating piles	1,241 70
21	Risdon Iron & Locomo- tive Works	757	Repairs	148 24
21	Mutual Electric Light Co.	758	Lights	1,920 68
21	James Byrne, Jr.	759	Petty cash expenses	238 91
21	Black Diamond Coal Mng. Co.	760	Coal	667 97
21	Hannah Bros.	761	Deferred payment draft No. 124	3,795 25
21	Jas. H. O'Brien	762	Teams and carts	304 50
21	Henry Fautz	763	Repairing lock	1 25
22	Healy, Tibbitts & Co.	764	Repairing Little Main St. wharf	100 80
23	California Mill Co.	765	Mill work	324 05
28	Betts Spring Co.	766	Repairs	6 25
28	Bancroft-Whitney Co.	767	California Reports	2 50
28	J. D. Barnes	768	Boom for Dredger No. 1	100 00
28	Baker & Hamilton	769	Hardware	172 63
28	H. S. Crocker Co.	770	Stationery	69 95
28	City Front Stables	771	Keeping horse, etc.	53 50
28	Cunningham, Curtiss & Welch	772	Stationery	48 55
28	Chas. F. Doe & Co.	773	Lumber	84 50
28	Evening Post	774	Advertising	55 00
28	Gray Bros.	775	Rock for Belt Railroad	27 50
28	Guide Publishing Co.	776	Guides	10 50
28	Golden State and Min- ers' Iron Works	777	Repairs to Dredger No. 3	276 00
28	Garlock Packing Co.	778	Hose cover	9 25
28	Getz Bros. & Co.	779	Soap, lye, etc.	26 38
28	Milton Heyneman-Mar- shall Co.	780	Stationery	38 93
28	G. M. Josselyn & Co.	781	Ensigns	29 50
28	Leary Bros.	782	Keeping horse	25 00
28	Marine Exchange	783	Reporting	25 00
28	Merchants' Exchange	784	Reporting	25 00
28	William J. Martin	785	Cleaning compound	15 00
28	Pacific Coast Rubber Co.	786	Packing	23 52
28	Plant Supply Co.	787	Packing	32 66
28	Pacific Hardware and Steel Co.	788	Wire cable	12 62
28	Pacific States Tel. and Tel. Co.	789	Telephones	176 65
28	Rowlands & Laughton	790	Repairs	58 48
28	Jas. A. Snook & Co.	791	Hardware	464 87
28	J. D. Spreckels & Bros.	792	Cement	111 75
28	Chas. F. Sloane & Co.	793	Switches	4 45
28	Southern Pacific Co.	794	Repairs to engine	4,051 83
28	H. N. Sessions & Co.	795	Testing meters	32 00
28	Henry B. Schindler Co.	796	Repairs	111 30
28	Spring Valley Water Co.	797	Water	290 00
28	John Twigg & Sons	798	Skiff	42 50
28	Harry Unna Co.	799	Sponges, brooms, etc.	59 20
28	Valvoline Oil Co.	800	Oil	50 45
28	Whittier-Ooburn Co.	801	Oil	78 34
28	Western Repair and Supply Co.	802	Chandlery	93 92
28	J. H. Bruce	803	Deferred payment draft No. 142	2,662 33
28	Yates & Co.	804	Paints, oil, etc.	170 99
28	Healy, Tibbitts & Co.	805	Constructing addition to Little Main Street Wharf	4,974 25

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1904				
Mar. 28	Henry R. Patterson	806	Teaming	\$22 60
28	Flinn & Treacy	807	Gravel	73 56
28	J. C. Sala	808	Repairing tape	50
28	Thos. Crowley & Bros.	809	Towing	51 50
28	Hodge Draying Co.	810	Teaming	2 50
28	Chas. A. Warren	811	Sand	50 00
29	James Mathews	812	Washing for fire house	3 50
29	Western Union Tel. Co.	813	Rental of clock	3 00
29	W. A. Boole & Son	814	Repairs to Dredger No. 3	611 77
29	Darby Laydon	815	Deferred payment draft No. 149	1,095 39
31	State Treasurer	816	Remittances	71,529 23
Total March, 1904				\$138,291 25
Apr. 1	State Controller	817	S. F. Depot Sinking Fund	\$4,631 00
9	Employés	818-831	Payroll, month of March	27,245 40
16	City Street Imp. Co.	832	Repairing Main St. Wharf	1,168 22
22	California Mill Co.	833	Millwork	143 10
22	Jas. H. O'Brien	834	Teams and carts	337 50
22	Yates & Co.	835	Paints, oil, etc.	318 05
22	A. J. Coffee Co.	836	Fire-alarm boxes	1,529 83
22	Hickman & Masterson	837	Lumber	4,075 12
22	Mutual Elec. Light Co.	838	Lights	2,075 53
22	Risdon Iron and Loco- motive Works	839	Repairs	1,949 98
22	Benj. Dallerup	840	Repairs, Dredger No. 3	609 74
22	Jas. A. Snook & Co.	841	Hardware	527 05
22	Williams, Belser & Co.	842	Paving blocks	450 00
22	Western Fuel Co.	843	Coal	994 79
22	R. D. Chandler	844	Coal	648 45
22	Southern Pacific Co.	845	Repairs, Belt Railroad	1,297 38
22	Black Diamond Coal Mng. Co.	846	Coal	850 43
22	Hammond Lumber Co.	847	Piles	243 60
22	Hammond Lumber Co.	848	Piles	247 44
22	Spring Valley Water Co.	849	Water	295 25
22	J. D. Spreckels & Bros.	850	Cement	172 41
22	Julian B. Harries	851	Expert accountant	37 50
22	Cunningham, Curtiss & Welch	852	Printing, etc.	217 00
22	Baker & Hamilton	853	Hardware	289 50
22	H. S. Crocker Co.	854	Stationery	104 98
22	R. Dunsmuir Sons Inc.	855	Coal	160 10
22	M. Heyneman-Marshall & Co.	856	Desks	99 50
22	Western Repairs and Supply Co.	857	Chandlery	237 57
22	Pac. States Tel. & Tel. Co.	858	Telephones	173 25
22	Harry Unna Co.	859	Lamps, etc.	198 23
23	Chas. Waltz	860	Repairing safe, etc.	4 50
23	S. F. Typewriter Exco'ge	861	Ribbon	1 00
23	Dunham, Carrigan & Hayden Co.	862	Grease cups	57
23	Henry R. Patterson	863	Teaming	56 05
23	Flinn & Treacy	864	Gravel, etc.	249 94
23	Thos. Crowley Bros.	865	Towing piles	54 00
23	S. O. Pacquinnucci	866	Repairing float	37 00
25	Pacific Towel Co.	867	Towel service	3 00
25	Mercantile Towel Co.	868	Towel service	3 00
25	Call, Chronicle, and Ex- aminer	869	Newspapers	10 65
25	Chas. A. Burns	870	Teaming	3 00
26	J. Anderson & Son	871	Repairing locks and keys	26 30
26	J. C. Sala	872	Repairing tape	50
26	J. D. Barnes	873	Repairing Dredgers Nos. 2 and 3	82 50

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1904				
Apr. 26	Betts Spring Co.	874	Repairing locomotive	\$26 00
26	A. L. Coombs	875	Transcribing	35 00
26	City Front Stables	876	Keeping horse	61 10
26	A. J. Bolfig	877	Services as collector	19 35
26	Evening Post	878	Advertising	70 00
26	Gray Bros.	879	Rock for Belt Railroad	85 25
26	Frank Greg	880	Sawdust	5 00
26	Golden State and Miners' Iron Works	881	Repairs, Dredger No. 3	22 18
26	Getz Bros. & Co.	882	Soap	9 38
26	Guide Publishing Co.	883	Guides	10 50
26	H. R. Herold	884	Services as collector	19 35
28	Leary Bros.	885	Keeping horse, etc.	38 50
28	Langley & Michaels Co.	886	Disinfectants	22 02
28	Merchants' Exchange	887	Reporting	25 00
28	Marine Exchange	888	Reporting	25 00
28	H. M. Nagle	889	Brooms	36 00
28	Pacific Coast Rubber Co.	890	Roofing, packing, etc.	61 13
28	Plant Supply Co.	891	Packing	6 06
28	Payot, Upham & Co.	892	Insurance blanks	9 00
28	Rowlands & Laughton	893	Repairs	28 80
28	Chas. F. Sloane Co.	894	Wire	47 52
28	Whittier-Coburn Co.	895	Oil	59 83
28	N. Clark & Sons	896	Sewer pipe	3 66
28	P. T. Browne	897	Barometer and flags	25 00
28	James Mathews	898	Washing for fire house	3 50
30	Healy, Tibbitts & Co.	899	Repairing spring line for ferry slips	2,569 77
30	Robert Greig	900	Slate roof, Ferry Depot.	995 00
30	State Treasurer	901	Remittances	74,923 46
Total April, 1904.				\$131,102 27
May				
2	State Controller	902	S. F. Depot Sinking Fund	\$4,631 00
5	Williams, Dimond & Co.	903	Locomotive	8,320 00
5	Frank Gallagher	904	Store house on Pier 9	2 211 75
10	Employés	905-918	Payroll, month of April	27,245 90
12	Healy, Tibbitts & Co.	919	Freight slip at Central Basin	11,177 77
23	Jas. H. O'Brien	920	Teams and carts	325 00
24	California Mill Co.	921	Millwork	174 90
26	Western Underwriters' Ass'n	922	Insurance	162 96
26	Pennsylvania Fire Ins. Co.	923	Insurance	122 23
26	Fireman's Fund Ins. Co.	924	Insurance	814 82
26	Atlas Assurance Co.	925	Insurance	448 15
26	Royal Exchange Assur- ance Co.	926	Insurance	651 85
26	Scottish Union and Na- tional Insurance Co.	927	Insurance	325 93
26	Home Fire and Marine Insurance Co.	928	Insurance	162 96
26	New York Underwriters' Agency	929	Insurance	407 41
26	Phenix Insurance Co. of Brooklyn	930	Insurance	977 78
26	German Insurance Co. of Freeport	931	Insurance	407 41
26	London Assurance Co.	932	Insurance	162 96
26	Insurance Co. of North America	933	Insurance	325 93
26	Hamburg-Bremen Fire Insurance Co.	934	Insurance	651 85
26	Manchester Assurance Co.	935	Insurance	244 44
26	Northern Assurance Co.	936	Insurance	162 96

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rec. No.	On Account of.	Amount.
1904				
May 26	Liverpool & London & Globe Insurance Co....	937	Insurance	\$162 96
26	Traders' Insurance Co....	938	Insurance	814 81
26	Caledonian Insurance Co.....	939	Insurance	162 96
26	Christensen, Edwards & Goodwin	940	Insurance	263 70
26	Voss, Conrad & Co.....	941	Insurance	488 89
26	C. J. Stovel	942	Insurance	162 96
26	Watson, Taylor & Sperry	943	Insurance	611 13
26	Watson, Taylor & Sperry	944	Insurance	162 96
26	Edward Brown & Sons...	945	Insurance	325 93
26	Geo. H. Tyson	946	Insurance	325 92
26	Catton, Bell & Co.....	947	Insurance	570 37
26	Curtis & Merrill	948	Insurance	162 96
26	Paul M. Nippert Co.....	949	Insurance	488 89
26	Gutte & Frank	950	Insurance	325 92
26	City Street Imp. Co.....	951	Repairing Main St. wharf	389 40
26	James Byrne, Jr.	952	Petty cash expenses	190 75
26	Bay City Engineering and Supply Co.....	953	Cup leathers	47 33
26	Geo. F. Buswell	954	Frictions, Dredger No. 1	25 00
26	Baker & Hamilton	955	Hardware	526 90
26	Black Diamond Coal Mng. Co.....	956	Coal	862 58
26	H. S. Crocker Co.....	957	Stationery	99 50
26	City Front Stables	958	Keeping horse	62 50
26	R. D. Chandler	959	Coal	691 70
26	Cunningham, Curtiss & Welch	960	Printing	55 00
26	R. Dunsmuir Sons Co...	961	Coal	153 97
26	Benj. Dallerup	962	Spuds for dredgers	137 50
26	Evening Post	963	Advertisement	50 00
26	E. M. Graney	964	Shoeing horse	10 00
26	Gray Bros.	965	Rock for Belt Railroad	52 25
26	W. T. Garratt & Co...	966	Repairs	12 95
26	Robert Greig	967	Shed on fish wharf	300 00
26	Guide Publishing Co...	968	Guides	11 00
26	Getz Bros. & Co.....	969	Soap	11 50
26	Frank Greg	970	Sawdust	5 00
26	Frank Greg	971	Sawdust	5 00
26	Garlock Packing Com- pound	972	Compound	15 00
26	Hammond Lumber Co...	973	Piles	948 92
26	Milton Heyneman-Mar- shall Co.....	974	Office furniture	115 00
26	J. Hendy Machine Wks.	975	Repairs	61 41
26	Hickman & Masterson ..	976	Lumber	3,572 41
26	Langley & Michaels Co.	977	Disinfectants	20 21
26	Merchants' Exchange ..	978	Reporting	25 00
26	Marine Exchange	979	Reporting	25 00
26	Murray Bros.	980	Repairs	12 00
26	Levi Strauss & Co.....	981	Crash, etc.	14 96
26	Mutual Electric Light Co.....	982	Lights	1,824 74
26	Pacific Coast Rubber Co.	983	Packing, etc.	133 03
26	Plant Supply Co.....	984	Repairs	12 00
26	Pacific States Tel. & Tel. Co.....	985	Telephones	172 65
26	Rowlands & Laughton ..	986	Repairs	106 23
26	Risdon Iron and Loco- motive Works	987	Repairs	919 09
26	J. D. Spreckels & Bros...	988	Cement	56 11
26	Southern Pacific Co...	989	Freight and repairs	1,189 88
26	Spring Valley Water Works	990	Water	279 15
	Harry Unna Co.....	991	Rags, etc.	39 50

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Feet. No.	On Account of.	Amount.
1904				
May 26	U. S. Laundry Ass'n.....	992	Laundry	\$20 40
26	Valvoline Oil Co.	993	Oil	38 45
26	Whittier-Coburn Co.	994	Oil	38 23
26	Western Repair and Supply Co.	995	Chandlery	176 17
26	Western Fuel Co.	996	Coal	280 17
26	Yates & Co.	997	Paints, oil, etc.	266 34
26	Hodge Draying Co.	998	Teaming	14 50
26	Henry R. Patterson	999	Teaming	109 03
26	W. J. Gilbert & Co.	1000	Water barrel	2 90
26	Flinn & Treacy	1001	Repairing pavement	115 00
26	S. F. Towel Co.	1002	Towel service	7 00
26	Thos. Crowley & Bros.	1003	Towing piles	61 50
26	Cal. Stevedore and Bal- last Co.	1004	Hauling sand	14 25
26	J. C. Sala	1005	Repairs	14 35
26	San José Brick Co.	1006	Brick	50
26	G. Graham	1007	Oats	8 87
27	James Mathews	1008	Washing for fire house	3 50
27	J. Breuner Co.	1009	Shades	2 00
27	Riegle & Jamieson	1010	Whitewashing	12 50
28	Mercantile Towel Co.	1011	Towel service	1 00
28	Smith Rice Co.	1012	Repairing time ball	114 50
31	Peter Beilles	1013	Expressing	1 00
31	J. O. Kane	1014	Repairs	2 75
31	Chas. A. Warren	1015	Rock and sand	260 00
31	Payroll	1016	Sweepers, watchmen, etc.	97 50
31	State Treasurer	1017	Remittances	68,049 18
	Total May, 1904			\$148,040 03
June 1	State Controller	1018	S. F. Depot Sinking Fund	\$4,631 00
2	Healy, Tibbitts & Co.	1019	Repairing dolphin between Slips No. 5 and No. 6	2,146 27
3	Boesch Lamp Co.	1020	Repairs, Belt Railroad	3 50
3	Healy, Tibbitts & Co.	1021	Repairing dolphin, Slip No. 6	1,154 99
7	C. J. Hendry Co.	1022	Lime	1 95
10	Tribune Publishing Co.	1023	Printing laws, etc.	375 00
10	Muir Bros.	1024	Repairing bucket for Dredger No. 1	282 43
10	Robert Greig	1025	Repairing roof, Union Depot	1,450 00
10	Robert Greig	1026	Slate roof, Union Depot	995 00
10	Frank Gallagher	1027	Shed on Pier 9	737 25
10	Employes	1028-1042	Payroll for month of May	26,956 10
10	Robert Wakefield	1043	Deferred payment draft No. 211	2,825 00
18	Gray Bros.	1044	Constructing seawall	2,940 91
18	H. R. Rood & Co.	1045	Coating piles	1,340 00
18	H. R. Rood & Co.	1046	Coating piles for Slips 1, 3, 4, 6, and 7 (D. P. 226)	1,340 00
18	H. R. Rood & Co.	1047	do (D. P. 227)	1,340 00
18	H. R. Rood & Co.	1048	do (D. P. 228)	1,340 00
24	Healy, Tibbitts & Co.	1049	Repairing spring lines of ferry slips	1,552 01
24	Robert Greig	1050	Slate roof, Union Depot	995 00
24	Betts Spring Co.	1051	Repairing locomotive	24 25
24	Black Diamond Coal Mng. Co.	1052	Coal	390 97
24	Baker & Hamilton	1053	Hardware	628 95
24	Geo. F. Buswell	1054	Frictions	127 17
24	Cunningham, Curtiss & Welch	1055	Printing	110 00
24	R. D. Chandler	1056	Coal	689 70
24	City Front Stables	1057	Keeping horse, etc.	53 60
24	H. S. Crocker Co.	1058	Stationery	109 79
24	R. Dunsmuir's Sons Co.	1059	Coal	107 87
24	B. Dallerup	1060	Repairs to dredgers	124 65
24	Guide Publishing Co.	1061	Guides	11 00
24	Garlock Packing Co.	1062	Compound	7 50

EXHIBIT B—Continued.

DISBURSEMENTS, 1903-1904—Continued.

Date.	Order.	Rect. No.	On Account of.	Amount.
1904				
June 24	Frank Greg	1063	Sawdust	\$5 00
24	Gray Bros.	1064	Rock, Belt Railroad	101 75
24	Getz Bros. & Co.	1065	Soap, lye, etc.	24 94
24	Hickman & Masterson ..	1066	Lumber	2,565 11
24	Hammond Lumber Co.	1067	Piles	1,000 20
24	J. Hendy Machine Wks.	1068	Repairs, Belt Railroad	203 42
24	Langley & Michaels Co.	1069	Soap	5 50
24	Leary Bros.	1070	Keeping horse	54 50
24	Wm. J. Martin	1071	Martin's cleaner	15 00
24	P. H. Murphy	1072	Repairs on roundhouse	426 20
24	Muir Bros.	1073	Repairs on dredgers	56 20
24	Marine Exchange	1074	Reporting	25 00
24	Merchants' Exchange	1075	Reporting	25 00
24	James A. McMahon	1076	Rent of scow driver	1,612 00
24	Mutual Elec. Light Co.	1077	Lights	1,812 10
24	H. M. Nagle	1078	Brooms	23 00
24	Pacific Coast Co.	1079	Coal	434 62
24	Pacific Coast Rubber Co.	1080	Packing and hose	113 60
24	Pacific Hardware and Steel Co.	1081	Hardware	164 26
24	Pacific States Tel. & Tel. Co.	1082	Telephones	172 85
24	Plant Supply Co.	1083	Valves, etc.	16 31
24	Rowlands & Laughton ..	1084	Repairs	37 40
24	Risdon Iron and Locomotive Works	1085	Repairs	158 04
24	H. N. Sessions & Co.	1086	Testing meters	96 00
24	Jas. A. Snook & Co.	1087	Hardware	653 14
24	Southern Pacific Co.	1088	Repairs	67 48
24	J. D. Spreckels & Bros.	1089	Cement	45 27
24	Levi Strauss & Co.	1090	Towels	17 76
24	Spring Valley Water Co.	1091	Water	301 05
24	H. B. Schindler & Co.	1092	Repairs	73 25
24	Valvoline Oil Co.	1093	Oil	34 45
24	Harry Unna Co.	1094	Brushes, brooms, etc.	142 56
24	Western Repair and Supply Co.	1095	Chandlery	453 38
24	Whittier-Coburn Co.	1096	Oil	58 44
24	Western Fuel Co.	1097	Coal	43 90
24	James Wilder Co.	1098	Towing pile-driver	27 50
24	Jas. H. O'Brien	1099	Teams and carts	312 50
24	C. A. Burns	1100	Hauling lumber	2 00
24	California Mill Co.	1101	Millwork	63 55
25	Thos. Crowley & Bros.	1102	Towing piles	49 50
25	P. L. Jones & Co.	1103	Repairs, buggy	21 25
25	H. R. Patterson	1104	Teaming	44 74
28	Howard C. Holmes	1105	Wharf merchandise	90 30
28	Henry Fautz	1106	Keys	2 75
28	W. J. Gilbert & Co.	1107	Water barrel	2 90
28	J. O'Shea	1108	Carts	120 00
30	Hodge Draying Co.	1109	Teaming	7 00
30	Western Union Tel. Co.	1110	Rental clock	1 00
30	J. R. La Fontaine	1111	Prints	41 67
30	Geo. Taylor	1112	Repairing harness	4 50
30	Yates & Co.	1113	Paints, oil, etc.	303 68
30	Smith, Rice & Co.	1114	Moving bell from tower	40 00
30	Holmes Lime Co.	1115	Lime	1 25
30	Mercantile Towel Co.	1116	Towel service	1 00
30	State Treasurer	1117	Remittances	89,584 38
	Total June, 1904			\$136,552 01
	Total for year			\$2,439,458 28

* Number of receipt for deferred payment draft.

† Missing numbers are receipts for deferred payment drafts. Numbers are entered when drafts are paid.

RECAPITULATION OF DISBURSEMENTS.

1902—July	\$118,074 02	
August	109,606 40	
September	133,706 96	
October	146,137 06	
November	124,780 66	
December	137,961 98	
1903—January	112,919 70	
February	125,710 57	
March	117,300 62	
April	125,739 20	
May	124,064 07	
June	141,081 89	
		\$1,517,083 13
1903—July	\$592,830 94	
August	173,010 05	
September	174,709 62	
October	207,962 15	
November	176,019 00	
December	195,837 39	
1904—January	223,722 90	
February	141,380 67	
March	138,291 25	
April	131,102 27	
May	148,040 03	
June	136,552 01	
		2,439,458 28
Total		\$3,956,541 41

EXHIBIT C.—*Summary of Receipts and Disbursements.*

RECEIPTS.

	1902-1903.	1903-1904.	Total.
From dockage.....	\$195,743 95	\$212,169 95	\$407,913 90
From tolls.....	260,174 23	276,402 42	536,576 65
From wharfage.....	7,735 00	9,038 95	16,773 95
From rents.....	309,612 15	415,258 55	724,870 70
From sale of old material.....	3,348 57	2,743 17	6,091 74
From damages, sales, etc.....	1,293 54	7,516 66	8,810 20
From belt railroad switching.....	47,266 20	71,924 12	119,190 32
From dredging.....	508 00	-----	508 00
From belt railroad construction.....	62 27	-----	62 27
From electric lighting.....	3,352 44	4,180 52	7,532 96
From discount account.....	-----	1,494 13	1,494 13
From fire loss account.....	-----	7,464 62	7,464 62
From drafts refused and cancelled.....	-----	88 60	88 60
Deferred payment drafts issued.....	\$829,096 35	\$1,008,281 69	\$1,837,378 04
Drafts drawn from San Francisco Harbor Improvement Fund.....	-----	504,218 01	504,218 01
Transfers to San Francisco Depot Sinking Fund.....	632,414 78	871,386 58	1,503,801 36
-----	55,572 00	55,572 00	111,144 00
	\$1,517,083 13	\$2,439,458 28	\$3,956,541 41

DISBURSEMENTS.

Salaries of Commissioners, Secretaries, Engineers, Draughtsmen, Attorney, Wharfingers, Collectors, Watchmen, and Clerks in Secretary's office.....	\$83,889 75	\$84,214 85	\$168,104 60
Construction, including building of new wharves, slips, sheds, sewers, and roadways; maintenance and repairs of waterfront streets, old wharves, buildings, and roadway.....	375,195 39	801,174 21	1,176,369 60
Wharf and street cleaning and sprinkling.....	30,354 41	32,980 88	63,335 29
Dredging.....	58,873 99	107,034 35	165,908 34
General expenses, including the following:			
Elec. lighting and supplies, 1903-4.....	\$28,308 70		
Legal expenses.....	3,315 66		
Premium of insurance.....	11,000 00		
Telephone service.....	4,535 99		
Furniture for various offices.....	545 12		
Lighting for account of Postoffice and wharves, 1902-3.....	12,832 29		
Revenue refunded.....	1,042 57		
Books, stationery and printing.....	5,134 23		
Messenger and Janitor.....	1,800 00		
Advertising, exchange, livery, marine reports, water, care of clocks, fuel, auditing, etc.....	9,419 29		
	25,754 02	52,179 83	77,933 85
Belt railroad, construction and maintenance, operating and equipment.....	57,650 63	80,343 86	137,994 49
Fire account.....	6,170 53	6,768 03	12,938 56
Seawall construction.....	-----	4,352 41	4,352 41
Dredging (contract) and purchase of scows and dredgers.....	30,699 00	34,674 00	65,373 00
Union Ferry Depot (expense).....	31,585 94	25,864 68	57,450 62
Damages, etc.....	-----	23,246 23	23,246 23
	\$700,173 66	\$1,252,333 33	\$1,953,006 99
Deferred payment drafts paid.....	-----	232,102 22	232,102 22
S. F. Harbor Imp. Fund, remitted to State Treasurer.....	761,337 47	898,862 13	1,660,199 60
S. F. Harbor Imp. Fund, drafts refused and canceled.....	-----	88 60	88 60
S. F. Depot Sinking Fund, transfers from S. F. Harbor Imp. Fund.....	55,572 00	55,572 00	111,144 00
	\$1,517,083 13	\$2,439,458 28	\$3,956,541 41

EXHIBIT E.—Statement of San Francisco Harbor Improvement Fund
(State Treasurer, Custodian), for the Two Years ending June 30, 1904.

1902—July 31	To amount remitted to State Treasurer	\$53,577 53	
Aug. 31	do	60,785 49	
Sept. 30	do	64,860 01	
Oct. 31	do	66,511 29	
Nov. 30	do	68,766 59	
Dec. 31	do	67,488 22	
1903—Jan. 31	do	61,406 97	
Feb. 28	do	60,911 53	
Mar. 31	do	59,166 67	
Apr. 30	do	67,116 48	
May 31	do	59,980 52	
June 30	do	70,766 17	
			\$761,337 47
July 31	do	\$84,663 36	
Aug. 31	do	68,778 62	
Sept. 30	do	74,798 38	
Oct. 31	do	78,296 08	
Nov. 30	do	95,174 06	
Nov. 30	To drafts refused and canceled	88 60	
Dec. 31	To amount remitted to State Treasurer	78,062 03	
1904—Jan. 31	do	68,715 03	
Feb. 29	do	66,288 32	
Mar. 31	do	71,529 23	
Apr. 30	do	74,923 46	
May 31	do	68,049 18	
June 30	do	69,584 38	
			898,950 73
	Total		\$1,660,288 20
	Amount in fund June 30, 1902		70,099 21
			\$1,730,387 41

		Drafts Drawn.	Transfers to S. F. Depot Sinking Fund.	Total.
1902—July	By amount of drafts drawn on			
	State Treasurer	\$53,927 52	\$4,631 00	\$58,558 52
Aug.	do	39,275 24	4,631 00	43,906 24
Sept.	do	58,279 45	4,631 00	62,910 45
Oct.	do	69,202 91	4,631 00	73,833 91
Nov.	do	45,417 31	4,631 00	50,048 31
Dec.	do	60,253 80	4,631 00	64,884 80
1903—Jan.	do	41,097 60	4,631 00	45,728 60
Feb.	do	54,485 45	4,631 00	59,116 45
Mar.	do	47,522 19	4,631 00	52,153 19
Apr.	do	49,598 77	4,631 00	54,229 77
May	do	53,627 61	4,631 00	58,258 61
June	do	59,726 93	4,631 00	64,357 93
	Total	\$632,414 78	\$55,572 00	\$687,986 78
1903—July	By amount of drafts drawn on			
	State Treasurer	\$57,331 00	\$4,631 00	\$61,962 00
Aug.	do	63,886 79	4,631 00	68,517 79
Sept.	do	71,193 44	4,631 00	75,824 44
Oct.	do	104,814 31	4,631 00	109,445 31
Nov.	do	71,751 15	4,631 00	76,382 15
Dec.	do	63,366 31	4,631 00	67,997 31
1904—Jan.	do	143,962 39	4,631 00	148,593 39
Feb.	do	66,395 38	4,631 00	71,026 38
Mar.	do	57,955 17	4,631 00	62,586 17
Apr.	do	46,653 69	4,631 00	51,284 69
May	do	70,397 36	4,631 00	75,028 36
June	do	53,679 59	4,631 00	58,310 59
	Total	\$871,386 58	\$55,572 00	\$926,958 58
	Total for two fiscal years ending June 30, 1904	\$1,503,801 36	\$111,144 00	\$1,614,945 36
	Balance in fund June 30, 1904			115,442 05
				\$1,730,387 41

EXHIBIT D.

Comparative Statement of Receipts and Disbursements—1863-1904.

Fiscal Year	RECEIPTS										DISBURSEMENTS									
	Total	From the Organization of the Commission	From the State	From the Federal Government	From the State	From the Federal Government	From the State	From the Federal Government	From the State	From the Federal Government	Total	For the Organization of the Commission	For the State	For the Federal Government	For the State	For the Federal Government	For the State	For the Federal Government	For the State	For the Federal Government
1863-64	\$117,848 28										\$676 25									
1864-65	177,593 66																			
1865-66	183,710 80																			
1866-67	336,474 36																			
1867-68	294,304 28																			
1868-69	287,860 53																			
1869-70	232,644 56																			
1870-71	148,017 03																			
1871-72	195,031 14																			
1872-73	190,330 47																			
1873-74	263,794 06																			
1874-75	373,741 72																			
1875-76	372,074 74																			
1876-77	448,087 25																			
1877-78	416,516 82																			
1878-79	406,420 55																			
1879-80	417,687 36																			
1880-81	419,437 49																			
1881-82	455,103 64																			
1882-83	438,030 54																			
1883-84	500,702 10																			
1884-85	500,702 10																			
1885-86	483,851 01																			
1886-87	527,890 96																			
1887-88	580,152 51																			
1888-89	599,517 54																			
1889-90	599,105 58																			
1890-91	690,221 20																			
1891-92	651,112 17																			
1892-93	629,557 55																			
1893-94	583,074 58																			
1894-95	596,611 61																			
1895-96	599,257 85																			
1896-97	562,123 05																			
1897-98	581,661 05																			
1898-99	630,455 62																			
1899-00	731,033 41																			
1900-01	772,980 03																			
1901-02	825,391 43																			
1902-03	829,696 35																			
1903-04	1,008,193 09																			
	\$19,609,624 43																			
	\$504,218 01																			
	\$11,870 28																			
	\$20,215,712 72																			
	\$1,271,196 99																			
	\$265,504 69																			
	\$2,653,084 40																			
	\$1,052,529 26																			
	\$402,936 07																			
	\$226,145 58																			
	\$532,711 19																			
	\$230,124 27																			
	\$634,447 00																			
	\$282,102 22																			
	\$115,442 05																			
	\$30,215,712 72																			

a, b, c, d, e, f, g, h, i, j, k, x—See Exhibit "A."

In "Miscellaneous, Including Damages" was included \$23,719.93 paid to J. D. Spreckels & Bros. Co. and Pacific Coast S. S. Co., by act of Legislature.

EXHIBIT F.

*Statement of the San Francisco Harbor Improvement Fund—November 1,
1863, to June 30, 1904.*

Fiscal Year. From the Organization of the Commission.	Charged to S. F. Harbor Improve- ment Fund (State Treasurer Cus- todian).	Drawn from S. F. Harbor Improve- ment Fund (State Treasurer Cus- todian).
1863-64	\$71,897 39	\$47,680 02
1864-65	123,365 23	62,334 82
1865-66	132,023 96	47,568 50
1866-67	268,573 45	64,345 94
1867-68	217,528 06	354,121 12
1868-69	212,532 07	310,213 27
1869-70	180,623 37	272,670 93
1870-71	96,097 20	73,914 13
1871-72	105,877 82	53,944 40
1872-73	91,042 59	80,640 23
1873-74	166,150 23	168,769 62
1874-75	245,369 00	189,549 17
1875-76	249,450 44	146,716 69
1876-77	310,909 33	266,661 37
1877-78	285,521 50	162,712 80
1878-79	274,370 87	241,764 39
1879-80	240,414 91	419,429 27
1880-81	204,782 41	527,487 44
1881-82	249,919 90	131,140 42
1882-83	194,860 84	165,586 90
1883-84	254,497 78	186,588 60
1884-85	259,702 01	376,700 41
1885-86	249,431 18	289,838 61
1886-87	245,509 83	136,926 50
1887-88	294,861 66	244,452 11
1888-89	321,605 12	247,137 61
1889-90	306,148 20	311,633 96
1890-91	319,721 19	232,991 25
1891-92	360,206 68	366,205 44
1892-93	334,575 70	376,049 89
1893-94	281,417 59	315,899 66
1894-95	215,278 73	381,585 26
1895-96	285,523 58	346,501 16
1896-97	256,612 21	281,991 29
1897-98	224,702 65	245,385 94
1898-99	334,943 72	314,371 42
1899-00	669,814 33	639,360 25
1900-01	725,703 72	745,015 51
1901-02	760,506 95	758,510 69
1902-03	761,337 47	687,986 78
1903-04	898,950 73	926,958 58
Balance in Treasury June 30, 1904		115,442 05
Totals	\$12,282,360 60	\$12,282,360 60

EXHIBIT G.

Statement of San Francisco Depot Sinking Fund, June 30, 1904.

		Sinking Fund.	Interest.	Total.
1902—June	To amount transferred from S. F. Harbor Improvement Fund.....	\$2,631 00	\$2,000 00	\$4,631 00
July	do	2,631 00	2,000 00	4,631 00
Aug.	do	2,631 00	2,000 00	4,631 00
Sept.	do	2,631 00	2,000 00	4,631 00
Oct.	do	2,631 00	2,000 00	4,631 00
Nov.	do	2,631 00	2,000 00	4,631 00
Dec.	do	2,631 00	2,000 00	4,631 00
1903—Jan.	do	2,631 00	2,000 00	4,631 00
Feb.	do	2,631 00	2,000 00	4,631 00
Mar.	do	2,631 00	2,000 00	4,631 00
Apr.	do	2,631 00	2,000 00	4,631 00
May	do	2,631 00	2,000 00	4,631 00
June	do	2,631 00	2,000 00	4,631 00
	Total.....	\$31,572 00	\$24,000 00	\$55,572 00
July	To amount transferred from S. F. Harbor Improvement Fund.....	\$2,631 00	\$2,000 00	\$4,631 00
Aug.	do	2,631 00	2,000 00	4,631 00
Sept.	do	2,631 00	2,000 00	4,631 00
Oct.	do	2,631 00	2,000 00	4,631 00
Nov.	do	2,631 00	2,000 00	4,631 00
Dec.	do	2,631 00	2,000 00	4,631 00
1904—Jan.	do	2,631 00	2,000 00	4,631 00
Feb.	do	2,631 00	2,000 00	4,631 00
Mar.	do	2,631 00	2,000 00	4,631 00
Apr.	do	2,631 00	2,000 00	4,631 00
May	do	2,631 00	2,000 00	4,631 00
June	do	2,631 00	2,000 00	4,631 00
	Total.....	\$31,572 00	\$24,000 00	\$55,572 00
	Total for two fiscal years ending June 30, 1904.....	\$63,144 00	\$48,000 00	\$111,144 00
	Transferred prior to June 30, 1902.....	297,303 00	226,000 00	523,303 00
	Total.....	\$360,447 00	\$274,000 00	\$634,447 00

EXHIBIT H.

Statement of Deferred Payment Draft Account for the Two Fiscal Years ending June 30, 1904.

DRAFTS ISSUED.

Date.	Draft No.	Issued to	Date Payable.	Account of	Amount.	Total.
1902. July 24	76	Robert Wakefield..	Oct. 24, '02	Greenwich St. Wharf No. 1	\$3,221 74	\$51,547 84
	77	do	Jan. 24, '03	do	3,221 74	
	78	do	Apr. 24, '03	do	3,221 74	
	79	do	July 24, '03	do	3,221 74	
	80	do	Oct. 24, '03	do	3,221 74	
	81	do	Jan. 24, '04	do	3,221 74	
	82	do	Apr. 24, '04	do	3,221 74	
	83	do	July 24, '04	do	3,221 74	
	84	do	Oct. 24, '04	do	3,221 74	
	85	do	Jan. 24, '05	do	3,221 74	
	86	do	Apr. 24, '05	do	3,221 74	
	87	do	July 24, '05	do	3,221 74	
	88	do	Oct. 24, '05	do	3,221 74	
	89	do	Jan. 24, '06	do	3,221 74	
	90	do	Apr. 24, '06	do	3,221 74	
	91	do	July 24, '06	do	3,221 74	
Aug. 20	92	Darby Laydon	Feb. 20, '03	Repairing Howard St. Wharf No. 1...	\$2,219 43	6,658 29
	93	do	May 20, '03	do	2,219 43	
	94	do	Aug 20, '03	do	2,219 43	
Aug. 20	95	do	Feb. 20, '03	Repairing Secs. 1 and 2, Seawall	\$1,479 34	4,438 02
	96	do	May 20, '03	do	1,479 34	
	97	do	Aug. 20, '03	do	1,479 34	
Sept. 3	98	S. D. LeClair	Sept. 3, '03	Repairing Mission St. Wharf No. 2...	\$2,247 27	2,247 27
Oct. 6	99	City Street Imp. Co.	Apr. 6, '03	Removing rock east side Steuart St. ...	\$2,350 00	
Oct. 15	100	Jas. A. McMahon..	Oct. 15, '03	Repairing Ferry Ship No. 2	\$1,866 47	7,465 90
	101	do	Jan. 15, '04	do	1,866 47	
	102	do	Apr. 15, '04	do	1,866 48	
	103	do	July 15, '04	do	1,866 48	
Nov. 5	104	Robert Wakefield..	Feb. 5, '03	Greenwich St. Wharf No. 2	\$3,164 92	50,638 72
	105	do	May 5, '03	do	3,164 92	
	106	do	Aug. 5, '03	do	3,164 92	
	107	do	Nov. 5, '03	do	3,164 92	
	108	do	Feb. 5, '04	do	3,164 92	
	109	do	May 5, '04	do	3,164 92	
	110	do	Aug. 5, '04	do	3,164 92	
	111	do	Nov. 5, '04	do	3,164 92	
	112	do	Feb. 5, '05	do	3,164 92	
	113	do	May 5, '05	do	3,164 92	
	114	do	Aug. 5, '05	do	3,164 92	
	115	do	Nov. 5, '05	do	3,164 92	
	116	do	Feb. 5, '06	do	3,164 92	
	117	do	May 5, '06	do	3,164 92	
	118	do	Aug. 5, '06	do	3,164 92	
	119	do	Nov. 5, '06	do	3,164 92	
Nov. 26	120	S.F. Timber Pres. Co.	Nov. 26, '03	Creosoting piles for Howard No. 2.	\$2,787 97	5,575 94
	121	do	May 26, '04	do	2,787 97	

EXHIBIT H—Continued.

Date.	Draft No.	Issued to	Date Payable.	Account of	Amount.	Total.
1902.						
Dec. 17	122	Hannah Bros.	Sept. 17, '03	Shed on Greenwich St. Wharf No. 1...	\$3,795 25	
	123	do	Dec. 17, '03	do	3,795 25	
	124	do	Mar 17, '04	do	3,795 25	
	125	do	June 17, '04	do	3,795 25	\$15,181 00
1903.						
Feb. 4	126	City Street Imp. Co.	Feb. 4, '04	Rebuilding Howard St. Wharf No. 2...	\$3,269 01	
	127	do	Aug. 4, '04	do	3,269 01	6,538 02
Feb. 25	128	Flinn & Treacy	May 25, '03	Cement	\$2,344 98	
	129	do	Aug. 25, '03	do	2,344 98	
	130	do	Nov. 25, '03	do	2,344 98	
	131	do	Feb. 25, '04	do	2,344 98	9,379 92
Mar. 11	132	J. H. Bruce	June 11, '03	Constructing Dredger No. 3....	\$9,350 00	
	133	do	Sept. 11, '03	do	9,350 00	
	134	do	Dec. 11, '03	do	9,350 00	28,050 00
Mar. 11	135	Dundon Bridge and Construction Co..	Dec. 11, '03	Repairing Ferry Slip No. 3....	\$1,092 56	
	136	do	Mar. 11, '04	do	1,092 56	
	137	do	June 11, '04	do	1,092 57	
	138	do	Sept. 11, '04	do	1,092 57	
	139	do	Dec. 11, '04	do	1,092 57	
	140	do	Mar. 11, '05	do	1,092 57	6,555 40
Mar. 18	141	J. H. Bruce	Dec 18, '03	Constructing two mud scows	\$2,662 33	
	142	do	Mar. 18, '04	do	2,662 33	
	143	do	June 18, '04	do	2,662 33	
	144	do	Sept. 18, '04	do	2,662 33	
	145	do	Dec. 18, '04	do	2,662 34	
	146	do	Mar. 18, '05	do	2,662 34	15,974 00
Mar. 30	147	Darby Laydon	Sept. 30, '03	Repairing Washing ton St. Wharf....	\$1,095 38	
	148	do	Dec. 30, '03	do	1,095 38	
	149	do	Mar. 30, '04	do	1,095 39	
	150	do	June 30, '04	do	1,095 39	4,381 54
Apr. 8	151	Hyde Constr'n Co..	July 8, '03	Constructing Broadway Wharf No. 1..	\$4,188 50	
	152	do	Oct. 8, '03	do	4,188 50	
	153	do	Jan. 8, '04	do	4,188 50	
	154	do	Apr. 8, '04	do	4,188 50	
	155	do	July 8, '04	do	4,188 50	
	156	do	Oct. 8, '04	do	4,188 50	
	157	do	Jan. 8, '05	do	4,188 50	
	158	do	Apr. 8, '05	do	4,188 50	
	159	do	July 8, '05	do	4,188 50	
	160	do	Oct. 8, '05	do	4,188 50	
	161	do	Jan. 8, '06	do	4,188 50	
	162	do	Apr. 8, '06	do	4,188 50	
	163	do	July 8, '06	do	4,188 50	
	164	do	Oct. 8, '06	do	4,188 50	
	165	do	Jan. 8, '07	do	4,188 50	
	166	do	Apr. 8, '07	do	4,188 50	67,016 00
Apr. 18	167	S. F. Dry Dock Co	July 18, '03	Constructing dry docks	\$1,560 30	
	18 168	do	Oct. 18, '03	do	1,560 30	
	18 169	do	Jan. 18, '04	do	1,560 30	
	18 170	do	Apr. 18, '04	do	1,560 30	
	18 171	do	July 18, '04	do	1,560 30	
	18 172	do	Oct. 18, '04	do	1,560 30	

EXHIBIT H—Continued.

Date.	Draft No.	Issued to.	Date Payable.	Account of.	Amount.	Total.
1902.						
Apr. 18	173	S. F. Dry Dock Co.	Jan. 18, '05	Constructing dry docks	\$1,560 30	
18	174	do	Apr. 18, '05	do	1,560 30	
18	175	do	July 18, '05	do	1,560 30	
18	176	do	Oct. 18, '05	do	1,560 30	
18	177	do	Jan. 18, '06	do	1,560 30	
18	178	do	Apr. 18, '06	do	1,560 30	
18	179	do	July 18, '06	do	1,560 30	
18	180	do	Oct. 18, '06	do	1,560 30	
18	181	do	Jan. 18, '07	do	1,560 30	
18	182	do	Apr. 18, '07	do	1,560 30	
18	183	do	July 18, '07	do	1,560 30	
18	184	do	Oct. 18, '07	do	1,560 30	
18	185	do	Jan. 18, '08	do	1,560 30	
18	186	do	Apr. 18, '08	do	1,560 30	
May 20	187	Flinn & Treacy	May 20, '04	Repairing Fishermen's Breakwater	\$2,450 00	\$31,206 00
June 30	188	J. D. Spreckels & Bros. Co.	Aug. 10, '03	Damage, loss of coal bunkers.	\$5,834 18	2,450 00
30	189	do	Nov. 10, '03	do	5,000 00	
30	190	do	Feb. 10, '04	do	5,000 00	
30	191	do	May 10, '04	do	5,000 00	
July 1	192	F. H. Masow	Apr. 1, '04	Shed on Broadway Wharf No. 1	\$3,499 17	20,834 18
1	193	do	July 1, '04	do	3,499 17	
1	194	do	Oct. 1, '04	do	3,499 17	
1	195	do	Jan. 1, '05	do	3,499 17	
1	196	do	Apr. 1, '05	do	3,499 16	
1	197	do	July 1, '05	do	3,499 16	
15	198	S. D. Le Clair	Aug. 19, '03	Repairing Broadway Wharf No. 2	\$3,143 20	20,995 00
15	199	do	July 15, '04	do	3,143 20	
15	200	do	Jan. 15, '05	do	3,143 20	
15	201	do	July 15, '05	do	3,143 20	
Oct. 22	202	Jas. A. McMahon	Apr. 14, '04	Shed on Greenwich St. Wharf No. 2	\$1,841 88	12,572 80
22	203	do	July 14, '04	do	1,841 88	
22	204	do	Oct. 14, '04	do	1,841 88	
22	205	do	Jan. 14, '05	do	1,841 88	
22	206	do	Apr. 14, '05	do	1,841 88	
22	207	do	July 14, '05	do	1,841 88	
22	208	do	Oct. 14, '05	do	1,841 88	
22	209	do	Jan. 14, '06	do	1,841 88	
Dec. 9	210	Robert Wakefield	Mar. 9, '04	Constructing Ferry Slip "A"	\$2,825 00	14,735 00
9	211	do	June 9, '04	do	2,825 00	
9	212	do	Sept. 9, '04	do	2,825 00	
9	213	do	Dec. 9, '04	do	2,825 00	
9	214	do	Mar. 9, '05	do	2,825 00	
9	215	do	June 9, '05	do	2,825 00	
9	216	do	Sept. 9, '05	do	2,825 00	
9	217	do	Dec. 9, '05	do	2,825 00	
9	218	do	Mar. 9, '06	do	2,825 00	
9	219	do	June 9, '06	do	2,825 00	
9	220	do	Sept. 9, '06	do	2,825 00	
9	221	do	Dec. 9, '06	do	2,825 00	
9	222	do	Mar. 9, '07	do	2,825 00	
9	223	do	June 9, '07	do	2,825 00	
9	224	do	Sept. 9, '07	do	2,825 00	
9	225	do	Dec. 9, '07	do	2,825 00	
						45,200 00

EXHIBIT H—Continued.

Date.	Draft No.	Issued to.	Date Payable.	Account of.	Amount.	Total.
1904.						
June 14	226	H. R. Rood & Co....	Sept 14, '04	Coating piles for repair of Slips 1, 3, 4, 6, 7	\$1,340 00	
14	227	do -----	Dec. 14, '04	do -----	1,340 00	
14	228	do -----	Mar. 14, '05	do -----	1,340 00	
						\$4,020 00
Amount outstanding June 30, 1902 -----						\$436,010 85
Total -----						180,571 34
						\$616,582 19

DRAFTS MATURED AND PAID.

Date.	Draft No.	To Whom Paid.	Amount.	Total.
1902.				
July 8	30	Robert Wakefield -----	\$3,089 45	
16	57	do -----	3,234 42	
22	4	Healy, Tibbitts & Co.	1,706 05	
24	4	Robert Wakefield -----	3,649 75	
				\$11,679 67
Aug. 19	48	Atlantic, Gulf and Pacific Co.	\$3,486 75	
				3,486 75
Sept. 11	28	S. F. Timber Preserving Co.	\$7,559 06	
19	52	do -----	1,696 66	
				9,255 72
Oct. 2	54	Healy, Tibbitts & Co.	\$1,555 71	
8	31	Robert Wakefield -----	3,089 45	
16	58	do -----	3,234 42	
22	47	Healy, Tibbitts & Co.	1,706 05	
24	5	Robert Wakefield -----	3,649 75	
24	76	do -----	3,221 74	
				16,457 12
Nov. 7	73	Fred Miller -----	\$1,846 75	
19	49	Atlantic, Gulf and Pacific Co.	3,486 75	
				5,333 50
Dec. 19	53	San Francisco Timber Preserving Co.	\$1,696 67	
				1,696 67
1903.				
Jan. 2	55	Healy, Tibbitts & Co.	\$1,555 71	
8	32	Robert Wakefield -----	3,089 45	
16	59	do -----	3,234 42	
24	6	do -----	3,649 75	
24	77	do -----	3,221 74	
				14,751 07
Feb. 5	104	Robert Wakefield -----	\$3,164 92	
7	74	Fred Miller -----	1,846 75	
9	50	Atlantic, Gulf and Pacific Co.	3,486 75	
20	92	Darby Laydon -----	2,219 43	
20	95	do -----	1,479 34	
				\$12,197 19
April 2	56	Healy, Tibbitts & Co.	\$1,555 71	
6	99	City Street Improvement Co.	2,350 00	
8	33	Robert Wakefield -----	3,089 45	
16	60	do -----	3,234 42	
24	7	do -----	3,649 75	
24	78	do -----	3,221 74	
				17,101 07

EXHIBIT H—*Continued.*
DRAFTS MATURED AND PAID.

Date.	Draft No.	To Whom Paid.	Amount.	Total.	
1903.					
May 5	105	Robert Wakefield	\$3,164 92	\$11,055 42	
7	75	Fred Miller	1,846 75		
20	93	Darby Laydon	2,219 43		
24	96	do	1,479 34		
25	128	Flinn & Treacy	2,344 98		
June 11	132	J. H. Bruce	\$9,350 00	9,350 00	
July 8	34	Robert Wakefield	\$3,089 45	18,944 16	
8	151	Hyde Construction Co.	4,188 50		
16	61	Robert Wakefield	3,234 42		
18	167	San Francisco Dry Dock Co.	1,560 30		
24	8	Robert Wakefield	3,649 75		
24	79	do	3,221 74	18,944 16	
Aug. 5	106	Robert Wakefield	\$3,164 92	18,186 06	
10	188	J. D. Spreckels & Bros. Co.	5,834 18		
19	198	S. D. Le Clair	3,143 20		
20	94	Darby Laydon	2,219 43		
20	97	do	1,479 35		
25	129	Flinn & Treacy	2,344 98	18,186 06	
Sept. 3	98	S. D. Le Clair	\$2,247 27	15,392 52	
11	133	J. H. Bruce	9,350 00		
17	122	Hannah Bros.	3,795 25		
Oct. 1	147	Darby Laydon	\$1,095 38	21,906 01	
8	35	Robert Wakefield	3,089 45		
8	152	Hyde Construction Co.	4,188 50		
15	100	Jas. A. McMahon	1,866 47		
16	62	Robert Wakefield	3,234 42		
18	168	S. F. Dry Dock Co.	1,560 30		
24	80	Robert Wakefield	3,221 74		
24	9	do	3,649 75		
Nov. 5	107	Robert Wakefield	\$3,164 92		21,906 01
10	189	J. D. Spreckels & Bros. Co.	5,000 00	10,509 90	
25	130	Flinn & Treacy	2,344 98		
Dec. 11	120	San Francisco Timber Preserving Co.	\$2,787 97		
11	134	J. H. Bruce	9,350 00	20,783 49	
11	135	Dundon Bridge and Construction Co.	1,092 56		
17	123	Hannah Bros.	3,795 25		
18	141	J. H. Bruce	2,662 33		
30	148	Darby Laydon	1,095 38		
1904.					
Jan. 6	192	Wells, Fargo & Co.'s Bank, assignee of F. H. Masow—discounted	\$3,499 17		4,188 50
6	37	Wells, Fargo & Co.'s Bank, assignee of Robert Wakefield—discounted	3,089 45		
6	154	Wells, Fargo & Co.'s Bank, assignee of Hyde Construction Co.—discounted	4,188 50		
6	202	Wells, Fargo & Co.'s Bank, assignee of Jas. A. McMahon—discounted	1,841 88	3,221 74	
6	102	C. F. McCarthy, assignee of Jas. A. McMahon—discounted	1,866 48		
6	64	Wells, Fargo & Co.'s Bank, assignee of Robert Wakefield—discounted	3,234 42		
6	170	San Francisco Dry Dock Co.—discounted	1,560 30	3,649 75	
6	82	Wells, Fargo & Co.'s Bank, assignee of Robert Wakefield—discounted	3,221 74		
6	11	Wells, Fargo & Co.'s Bank, assignee of Robert Wakefield—discounted	3,649 75		
6	109	Wells, Fargo & Co.'s Bank, assignee of Robert Wakefield—discounted	3,164 92	3,164 92	

EXHIBIT H—*Continued.*

DRAFTS MATURED AND PAID.

Date.	Draft No.	To Whom Paid.	Amount.	Total.
1904.				
Jan.	6	191 J. D. Spreckels & Bros. Co.—discounted	\$5,000 00	
	6	187 First National Bank, assignee of Flinn & Treacy—discounted	2,450 00	
	6	121 San Francisco Timber Preserving Co.—discounted	2,787 97	
	6	137 Dundon Bridge and Construction Co.—discounted	1,092 57	
	6	125 Wells, Fargo & Co.'s Bank, assignee of Hannah Bros.—discounted	3,795 25	
	6	143 J. H. Bruce—discounted	2,604 34	
	6	150 London and San Francisco Bank, assignee of Darby Laydon—discounted	1,095 39	
	6	193 Wells, Fargo & Co.'s Bank, assignee of F. H. Masow—discounted	3,499 17	
	5	38 Wells, Fargo & Co.'s Bank, assignee of Robert Wakefield—discounted	3,089 45	
	6	155 Wells, Fargo & Co.'s Bank, assignee of Hyde Construction Co.—discounted	4,188 50	
	6	203 Wells, Fargo & Co.'s Bank, assignee of Jas. A. McMahon—discounted	1,795 20	
	6	199 Wells, Fargo & Co.'s Bank, assignee of S. D. Le Clair—discounted	3,143 20	
	6	103 C. F. McCarthy, assignee of Jas. A. McMahon—discounted	1,866 48	
	6	65 Wells, Fargo & Co.'s Bank, assignee of Robert Wakefield—discounted	3,234 42	
	6	171 San Francisco Dry Dock Co.—discounted	1,560 30	
	6	12 Wells, Fargo & Co.'s Bank, assignee of Robert Wakefield—discounted	3,649 75	
	6	83 Wells, Fargo & Co.'s Bank, assignee of Robert Wakefield—discounted	3,221 74	
	8	36 Robert Wakefield	3,089 45	
	8	153 Hyde Construction Co.	4,188 50	
	15	101 Jas. A. McMahon	1,866 47	
	16	63 Robert Wakefield	3,234 42	
	18	169 San Francisco Dry Dock Co.	1,560 30	
	24	10 Robert Wakefield	3,649 75	
	24	81 do	3,221 74	
				\$98,305 64
Feb.	4	126 City Street Improvement Co.	\$3,269 01	
	5	108 Robert Wakefield	3,164 92	
	10	190 J. D. Spreckels & Bros. Co.	5,000 00	
	25	131 Flinn & Treacy	2,344 98	
				13,778 91
Mar.	9	210 Robert Wakefield	\$2,825 00	
	11	136 Dundon Bridge and Construction Co.	1,092 56	
	17	124 Hannah Bros.	3,795 25	
	18	142 J. H. Bruce	2,662 33	
	30	149 Darby Laydon	1,095 39	
				11,470 53
June	9	211 Robert Wakefield	\$2,825 00	
		Total paid for two fiscal years ending June 30, 1904		2,825 00
				\$344,460 40
		Balance outstanding June 30, 1904		\$272,115 79

The above outstanding deferred payment drafts are payable as follows:

Year ending June 30, 1905	\$118,512 22
Year ending June 30, 1906	97,865 59
Year ending June 30, 1907	43,846 78
Year ending June 30, 1908	11,891 20
Total	\$272,115 79

EXHIBIT I.

COST OF COMPLETED SEAWALL.

Section.	Length—Feet.	Cost per Lineal Foot.	Total Cost.
Section A, constructed in 1879-80	561	\$152 61	\$85,614 53
Section 1, constructed in 1878-79	1,000	165 63	165,631 40
Section 2, constructed in 1879-80	1,000	167 50	167,504 09
Section 3, constructed in 1879-81	1,000	235 50	235,049 51
Section 4, constructed in 1880-82	1,000	240 87	240,872 01
Section 5, constructed in 1883-84	1,000	169 89	169,893 57
Section 6, constructed in 1885-86	800	158 47	126,779 73
Section 7, constructed in 1887-89	1,000	109 32	109,327 99
Section 8b, constructed in 1888-90	450	248 50	111,629 12
Section B, constructed in 1890-93	1,000	114 60	114,601 18
Section 8a, constructed in 1891-93	392	219 41	86,008 09
Total	9,203	Av., \$175 26	\$1,612,911 22

EXHIBIT J.

*Belt Railroad Revenue and Expense for the Two Fiscal Years ending
June 30, 1904.*

REVENUE.

Fiscal Year ending June 30—	Construction.	Sale of Old Material.	Switching Cars.	Total.
1892			\$4,580 75	\$4,580 75
1893			12,039 00	12,039 00
1894			10,775 25	10,775 25
1895			10,118 75	10,118 75
1896		\$5,934 25	11,730 00	17,664 25
1897			11,619 25	11,619 25
1898			13,313 50	13,313 50
1899			17,090 25	17,090 25
1900			19,402 25	19,402 25
1901			27,477 00	27,477 00
1902			38,992 53	38,992 53
1903	\$62 27		47,266 20	47,328 47
1904			71,924 12	71,924 12
Totals	\$62 27	\$5,934 25	\$296,328 85	\$302,325 37

EXHIBIT J—*Continued.*

EXPENSE.

Fiscal Year ending June 30--	Construction and Equipment.	Maintenance and Operating.	Total.
1891	\$327 61	-----	\$327 61
1892	74,188 90	\$7,118 56	81,307 46
1893	4,496 68	11,436 42	15,933 10
1894	50 69	14,592 94	14,643 63
1895	11,587 38	19,167 88	30,755 26
1896	-----	15,189 01	15,189 01
1897	-----	11,422 57	11,422 57
1898	-----	18,458 63	18,458 63
1899	-----	25,539 38	25,539 38
1900	-----	37,476 81	37,476 81
1901	37,519 31	38,827 27	76,346 58
1902	19,314 90	48,001 86	67,316 76
1903	14,242 48	43,408 15	57,650 63
1904	Construction. \$402 71 Equipment. \$10,652 01	Maintenance. 25,695 79 Operating. 43,593 25	80,343 76
Total	-----	-----	\$532,711 19

EXHIBIT K.

Work Under Way at Date of Last Biennial Report and Since Completed.

Building Car Ferry Slips, Nos. 1 and 2 (North of Pier No. 27). Robert Wakefield, contractor. Date of contract, November 28, 1900.

Contract price	\$72,995 00	
Addition to contract, October 1, 1901	506 40	
		\$73,501 40
Paid Mar. 14, 1901	\$3,017 27	
Paid Apr. 4, 1901	3,248 06	
Paid May 9, 1901	3,953 97	
Paid June 12, 1901	2,189 85	
Paid July 24, 1901	2,189 85	
Paid Oct. 12, 1901	506 40	
Paid discount on D. P. Draft No. 1	6 00	
Paid Oct. 12, 1901	3,643 75	
Paid discount on D. P. Draft No. 2	51 99	
Paid Oct. 12, 1901	3,597 76	
Paid Apr. 24, 1902	3,649 75	
Paid July 24, 1902	3,649 75	
Paid Oct. 24, 1902	3,649 75	
Paid Jan. 24, 1903	3,649 75	
Paid Apr 24, 1903	3,649 75	
Paid July 1, 1903—By D. P. Draft 8, due July 24, '03.	3,649 75	
Paid July 1, 1903—By D. P. Draft 9, due Oct. 24, '03.	3,649 75	
Paid July 1, 1903—By D. P. Draft 10, due Jan. 24, '04.	3,649 75	
Paid July 1, 1903—By D. P. Draft 11, due Apr. 24, '04.	3,649 75	
Paid July 1, 1903—By D. P. Draft 12, due July 24, '04.	3,649 75	
Paid July 1, 1903—By D. P. Draft 13, due Oct. 24, '04.	3,649 75	
Paid July 1, 1903—By D. P. Draft 14, due Jan. 24, '05.	3,649 75	
Paid July 1, 1903—By D. P. Draft 15, due Apr. 24, '05.	3,649 75	
Paid July 1, 1903—By D. P. Draft 16, due July 24, '05.	3,649 75	
		\$73,501 40

EXHIBIT K—*Continued.*

Constructing Union Street Wharf No. 2 (Pier No. 19). Robert Wakefield, contractor. Date of contract, November 28, 1900.

Contract price.....	\$61,789 00	
Addition to contract October 1, 1901.....	741 12	
		\$62,530 12
Paid Apr. 4, 1901.....	\$2,227 02	
Paid June 12, 1901.....	3,053 58	
Paid Oct. 12, 1901.....	1,747 28	
Paid Oct. 12, 1901.....	741 12	
Paid Nov. 13, 1901.....	2,858 36	
Paid Jan. 8, 1902.....	2 471 56	
Paid Apr. 8, 1902.....	3,089 45	
Paid July 8, 1902.....	3,089 45	
Paid Oct. 8, 1902.....	3,089 45	
Paid Jan. 8, 1903.....	3,089 45	
Paid Apr. 8, 1903.....	3,089 45	
Paid July 1, 1903—By D. P. Draft 34, due July 8, 1903	3,089 45	
Paid July 1, 1903—By D. P. Draft 35, due Oct. 8, 1903	3,089 45	
Paid July 1, 1903—By D. P. Draft 36, due Jan. 8, 1904	3,089 45	
Paid July 1, 1903—By D. P. Draft 37, due Apr. 8, 1904	3,089 45	
Paid July 1, 1903—By D. P. Draft 38, due July 8, 1904	3,089 45	
Paid July 1, 1903—By D. P. Draft 39, due Oct. 8, 1904	3,089 45	
Paid July 1, 1903—By D. P. Draft 40, due Jan. 8, 1905	3,089 45	
Paid July 1, 1903—By D. P. Draft 41, due Apr. 8, 1905	3,089 45	
Paid July 1, 1903—By D. P. Draft 42, due July 8, 1905	3,089 45	
Paid July 1, 1903—By D. P. Draft 43, due Oct. 8, 1905	3,089 45	
Paid July 1, 1903—By D. P. Draft 44, due Jan. 8, 1906	3,089 45	
		\$62,530 12

Constructing Filbert Street Wharf (Pier No. 21). Robert Wakefield, contractor. Date of contract, November 28, 1900.

Contract price.....	\$64,893 00	
Addition to contract, March 3, 1902.....	807 75	
		\$65,700 75
Deduction from contract, April 16, 1902.....		204 60
Total amount of contract.....		\$65,496 15
Paid Nov. 28, 1901.....	\$3,893 58	
Paid Jan. 29, 1902.....	6,489 30	
Paid Mar. 12, 1902.....	807 75	
Paid Apr. 16, 1902.....	2,554 80	
Paid July 16, 1902.....	3,234 42	
Paid Oct. 16, 1902.....	3,234 42	
Paid Jan. 16, 1903.....	3,234 42	
Paid Apr. 16, 1903.....	3,234 42	
Paid July 1, 1903—By D. P. Draft No. 61, due July 16, 1903	3,234 42	
Paid July 1, 1903—By D. P. Draft No. 62, due Oct. 16, 1903	3,234 42	
Paid July 1, 1903—By D. P. Draft No. 63, due Jan. 16, 1904	3,234 42	
Paid July 1, 1903—By D. P. Draft No. 64, due Apr. 16, 1904	3,234 42	
Paid July 1, 1903—By D. P. Draft No. 65, due July 16, 1904	3,234 42	
Paid July 1, 1903—By D. P. Draft No. 66, due Oct. 16, 1904	3,234 42	
Paid July 1, 1903—By D. P. Draft No. 67, due Jan. 16, 1905	3,234 42	
Paid July 1, 1903—By D. P. Draft No. 68, due Apr. 16, 1905	3,234 42	
Paid July 1, 1903—By D. P. Draft No. 69, due July 16, 1905	3,234 42	
Paid July 1, 1903—By D. P. Draft No. 70, due Oct. 16, 1905	3,234 42	
Paid July 1, 1903—By D. P. Draft No. 71, due Jan. 16, 1906	3,234 42	
Paid July 1, 1903—By D. P. Draft No. 72, due Apr. 16, 1906	3,234 42	
		\$65,496 15

EXHIBIT K—*Continued.*

Constructing Greenwich Street Wharf No. 1 (Pier No. 23). Robert Wakefield, contractor. Date of contract, November 28, 1900.

Contract price	\$63,975 00	
Addition to contract, April 29, 1902	706 50	
Addition to contract, July 24, 1902	459 80	
Total amount of contract		\$65,141 30
Paid Mar. 5, 1902	\$3,838 50	
Paid May 7, 1902	3,838 50	
Paid June 4, 1902	2,559 00	
Paid June 4, 1902	706 50	
Paid July 24, 1902	2,650 96	
Paid Oct. 24, 1902	3,221 74	
Paid Jan. 24, 1903	3,221 74	
Paid Apr. 24, 1903	3,221 74	
Paid July 1, 1903—By D. P. Draft No. 79, due July 24, 1903	3,221 74	
Paid July 1, 1903—By D. P. Draft No. 80, due Oct. 24, 1903	3,221 74	
Paid July 1, 1903—By D. P. Draft No. 81, due Jan. 24, 1904	3,221 74	
Paid July 1, 1903—By D. P. Draft No. 82, due Apr. 24, 1904	3,221 74	
Paid July 1, 1903—By D. P. Draft No. 83, due July 24, 1904	3,221 74	
Paid July 1, 1903—By D. P. Draft No. 84, due Oct. 24, 1904	3,221 74	
Paid July 1, 1903—By D. P. Draft No. 85, due Jan. 24, 1905	3,221 74	
Paid July 1, 1903—By D. P. Draft No. 86, due Apr. 24, 1905	3,221 74	
Paid July 1, 1903—By D. P. Draft No. 87, due July 24, 1905	3,221 74	
Paid July 1, 1903—By D. P. Draft No. 88, due Oct. 24, 1905	3,221 74	
Paid July 1, 1903—By D. P. Draft No. 89, due Jan. 24, 1906	3,221 74	
Paid July 1, 1903—By D. P. Draft No. 90, due Apr. 24, 1906	3,221 74	
Paid July 1, 1903—By D. P. Draft No. 91, due July 24, 1906	3,221 74	
		\$65,141 30

Constructing Greenwich Street Wharf No. 2 (Pier No. 25). Robert Wakefield, contractor. Date of contract, November 28, 1900.

Contract price	\$63,195 00	
Addition to contract, June 3, 1902	908 55	
Addition to contract, November 5, 1902	103 40	
Total amount of contract		\$64,206 95
Paid June 4, 1902	\$1,895 85	
Paid June 4, 1902	908 55	
Paid June 25, 1902	1,895 85	
Paid Aug. 20, 1902	4,423 65	
Paid Sept. 17, 1902	2,527 80	
Paid Nov. 5, 1902	1,916 53	
Paid Feb. 5, 1903	3,164 92	
Paid May 5, 1903	3,164 92	
Paid July 1, 1903—By D. P. Draft 106, due Aug. 5, '03	3,164 92	
Paid July 1, 1903—By D. P. Draft 107, due Nov. 5, '03	3,164 92	
Paid July 1, 1903—By D. P. Draft 108, due Feb. 5, '04	3,164 92	
Paid July 1, 1903—By D. P. Draft 109, due May 5, '04	3,164 92	
Paid July 1, 1903—By D. P. Draft 110, due Aug. 5, '04	3,164 92	
Paid July 1, 1903—By D. P. Draft 111, due Nov. 5, '04	3,164 92	
Paid July 1, 1903—By D. P. Draft 112, due Feb. 5, '05	3,164 92	
Paid July 1, 1903—By D. P. Draft 113, due May 5, '05	3,164 92	
Paid July 1, 1903—By D. P. Draft 114, due Aug. 5, '05	3,164 92	
Paid July 1, 1903—By D. P. Draft 115, due Nov. 5, '05	3,164 92	
Paid July 1, 1903—By D. P. Draft 116, due Feb. 5, '06	3,164 92	
Paid July 1, 1903—By D. P. Draft 117, due May 5, '06	3,164 92	
Paid July 1, 1903—By D. P. Draft 118, due Aug. 5, '06	3,164 92	
Paid July 1, 1903—By D. P. Draft 119, due Nov. 5, '06	3,164 92	
		\$64,206 95

EXHIBIT K—*Continued.*

Furnishing cement for Car Ferry Slips Nos. 1 and 2 and Piers Nos. 19, 21, 23, and 25. H. M. Newhall & Co., contractors. Date of contract, June 3, 1901.

Contract price, \$12.32 per ton of 2,000 pounds.

Amount furnished—

Aug. 22, 1901—248 $\frac{348}{2000}$ tons.	Paid Oct. 14, 1901.....	\$2,641 70
Nov. 26, 1901—150 tons.	Paid Nov. 29, 1901.....	1,848 00
Jan. 6, 1902—212 $\frac{1662}{2000}$ tons.	Paid Jan. 6, 1902.....	2,622 08
Jan. 15, 1902—124 $\frac{1888}{2000}$ tons.	Paid Jan. 20, 1902.....	1,535 07
Feb. 10, 1902—181 $\frac{770}{2000}$ tons.	Paid Feb. 19, 1902.....	2,234 66
Mar. 19, 1902—100 tons.	Paid Apr. 2, 1902.....	1,232 00
Mar. 31, 1902—76 $\frac{1888}{2000}$ tons.	Paid Apr. 9, 1902.....	947 78
Apr. 9, 1902—100 tons.	Paid Apr. 16, 1902.....	1,232 00
Apr. 21, 1902—100 tons.	Paid Apr. 30, 1902.....	1,232 00
May 31, 1902—100 tons.	Paid June 4, 1902.....	1,232 00
June 9, 1902—100 tons.	Paid June 18, 1902.....	1,232 00
June 16, 1902—99 $\frac{1888}{2000}$ tons.	Paid June 25, 1902.....	1,229 54
July 10, 1902—143 $\frac{670}{2000}$ tons.	Paid July 23, 1902.....	1,765 89
May 26, 1902—100 tons.	Paid July 23, 1902.....	1,232 00
Aug. 4, 1902—145 $\frac{1888}{2000}$ tons.	Paid Aug. 6, 1902.....	1,795 79
Aug. 30, 1902—260 $\frac{245}{2000}$ tons.	Paid Sept. 3, 1902.....	3,206 21
Aug. 2, 1902—122 $\frac{290}{2000}$ tons.	Paid Dec. 12, 1902.....	1,504 83
2,331 $\frac{670}{2000}$ tons.		<u>\$28,723 55</u>

Repiling and repairing spring lines and clusters at Ferry Slips Nos. 1, 5, 6, and 7. Healy, Tibbitts & Co., contractors. Date of contract, April 24, 1901.

Contract price—

Furnishing, driving and fastening piles, \$15.50 per pile.

Furnishing and placing new lumber, \$39 per 1,000 feet.

Work done and accepted—

1,104 piles driven and fastened, at \$15.50 per pile...	\$17,112 00	
145,331 feet lumber furnished and fastened, at \$39		
per 1,000 feet	5,667 90	
		<u>\$22,779 90</u>
Paid July 24, 1901	\$1,766 69	
Paid Nov. 20, 1901	7,640 52	
Discount	146 00	
Paid Dec. 4, 1901	1,766 69	
Paid Jan. 22, 1902	1,706 05	
Paid Feb. 12, 1902	1,081 74	
Discount	20 66	
Paid Mar. 4, 1902	1,766 70	
Paid Apr. 22, 1902	1,706 05	
Paid June 4, 1902	1,766 70	
Paid July 22, 1902	1,706 05	
Paid Oct. 22, 1902	1,706 05	
		<u>\$22,779 90</u>

EXHIBIT K—*Continued.*

Treating spring and cluster piles for Ferry Slips Nos. 1, 5, 6, and 7. San Francisco Timber Preserving Co., contractors. Date of contract, April 17, 1901.

Contract price—

- 12-in. piles with 10 lbs. creosote injected, 27 cents per lineal foot.
- 13-in. piles with 10 lbs. creosote injected, 30 cents per lineal foot.
- 14-in. piles with 10 lbs. creosote injected, 33 cents per lineal foot.
- 15-in. piles with 10 lbs. creosote injected, 36 cents per lineal foot.
- 16-in. piles with 10 lbs. creosote injected, 41 cents per lineal foot.

Amount of work accepted December 10, 1901—

67 piles, 13-in. butts, 4,271 ft. creosoted, at 30 cents..	\$1,281 30	
244 piles, 14-in. butts, 15,828 ft. creosoted, at 33 cents..	5,223 24	
245 piles, 15-in. butts, 15,815 ft. creosoted, at 36 cents..	5,693 40	
96 piles, 16-in. butts, 6,170 ft. creosoted, at 41 cents..	2,529 70	
12 piles, 17-in. butts, 777 ft. creosoted, at 46 cents..	357 42	
1 pile, 18-in. butts, 63 ft. creosoted, at 51½ cents..	33 07	
		\$15,118 13
Paid Mar. 11, 1902	\$3,023 63	
Paid Sept. 11, 1902	7,559 06	
Paid June 11, 1902	4,535 44	
		\$15,118 13

Car Ferry Slip at Fourth street. Atchison, Topeka & Santa Fé Railway Co., contractors. Date of contract, June 28, 1901.

Contract price..... \$60,000 00

June 1, 1904, lease signed with A. T. & S. F. Railway Co. for fifty-eight (58) months from February 6, 1903, in full payment of the sum of sixty thousand dollars (\$60,000.00), the contract price for this work.

Creosoting piles for repiling and repairing Pier No. 17 (Union Street Wharf). San Francisco Timber Preserving Co., contractors. Date of contract, October 30, 1901.

Contract price—

- 12-in. piles, 10 lbs. creosote injected, 27 cents per lineal foot.
- 13-in. piles, 10 lbs. creosote injected, 30 cents per lineal foot.
- 14-in. piles, 10 lbs. creosote injected, 33 cents per lineal foot.
- 15-in. piles, 10 lbs. creosote injected, 36 cents per lineal foot.
- 16-in. piles, 10 lbs. creosote injected, 41 cents per lineal foot.
- 17-in. piles, 10 lbs. creosote injected, 46 cents per lineal foot.

Work done and accepted Mar. 13, 1902—

163 12-in. piles, 10,071 ft. creosoted, at 27 cents.....	\$2,719 17	
110 13-in. piles, 6,916 ft. creosoted, at 30 cents.....	2,074 80	
1 14-in. pile, 65 ft. creosoted, at 33 cents.....	21 45	
3 16-in. piles, 177 ft. creosoted, at 41 cents	72 57	
6 17-in. piles, 361 ft. creosoted, at 47 cents	169 67	
1 18-in. pile, 61 ft. creosoted, at 53 cents.....	32 33	
		\$5,089 99
Paid June 19, 1902	\$1,696 66	
Paid Sept. 19, 1902	1,696 66	
Paid Dec. 19, 1902	1,696 67	
		\$5,089 99

EXHIBIT K—*Continued.*

Dredging a part of Channel Street. Atlantic, Gulf and Pacific Co., contractors. Date of contract, January 11, 1902.

Contract price.....	\$13,947 00
Paid Feb. 19, 1902.....	\$3,486 75
Paid Aug. 19, 1902.....	3,486 75
Paid Nov. 19, 1902.....	3,486 75
Paid Feb 19, 1903.....	3,486 75
	<hr/>
	\$13,947 00

Reconstructing Pier No. 9 (Broadway Wharf No. 1). Hyde Construction Co., contractors. Date of contract, January 14, 1902.

Contract price.....	\$73,770 00
Addition to contract, October 14, 1902.....	10,000 00
Addition to contract, April 10, 1903.....	310 05

Total amount of contract.....	\$84,080 05
Paid Sept. 3, 1902.....	\$4,426 20
Paid Oct. 16, 1902.....	3,448 18
Paid Dec. 12, 1902.....	4,691 12
Paid Feb. 9, 1903.....	2,513 10
Paid Apr. 8, 1903.....	1,675 40
Paid Apr. 16, 1903.....	310 05
Paid July 1, 1903—By D. P. Draft 151, due July 8, '03	4,188 50
Paid July 1, 1903—By D. P. Draft 152, due Oct. 8, '03	4,188 50
Paid July 1, 1903—By D. P. Draft 153, due Jan. 8, '04	4,188 50
Paid July 1, 1903—By D. P. Draft 154, due Apr. 8, '04	4,188 50
Paid July 1, 1903—By D. P. Draft 155, due July 8, '04	4,188 50
Paid July 1, 1903—By D. P. Draft 156, due Oct. 8, '04	4,188 50
Paid July 1, 1903—By D. P. Draft 157, due Jan. 8, '05	4,188 50
Paid July 1, 1903—By D. P. Draft 158, due Apr. 8, '05	4,188 50
Paid July 1, 1903—By D. P. Draft 159, due July 8, '05	4,188 50
Paid July 1, 1903—By D. P. Draft 160, due Oct. 8, '05	4,188 50
Paid July 1, 1903—By D. P. Draft 161, due Jan. 8, '06	4,188 50
Paid July 1, 1903—By D. P. Draft 162, due Apr. 8, '06	4,188 50
Paid July 1, 1903—By D. P. Draft 163, due July 8, '06	4,188 50
Paid July 1, 1903—By D. P. Draft 164, due Oct. 8, '06	4,188 50
Paid July 1, 1903—By D. P. Draft 165, due Jan. 8, '07	4,188 50
Paid July 1, 1903—By D. P. Draft 166, due Apr. 8, '07	4,188 50
	<hr/>
	\$84,080 05

Repiling and repairing north side of Channel Street Wharf. Healy, Tibbitts & Co., contractors. Date of contract, January 22, 1902.

Contract price—

Furnishing, driving, and fastening piles, \$9.50 per pile.

Furnishing materials and labor for splicing piles, \$1.35 per pile.

Furnishing and placing new lumber, \$18 per 1,000 feet (B. M.).

Work done and accepted April 2, 1902—

235 piles furnished and fastened, at \$9.50 per pile...	\$2,232 50
5 piles (standard) and 4 fender piles redriven, at \$6.00 per pile.....	54 00
35 piles (standard) spliced, at \$1.35 per pile.....	47 25
66 piles (standard) sawed off—6 days' work, at \$4.00 per day.....	24 00
816 feet extra length of piling, at 15 cents per foot...	122 40
207,650 feet lumber, furnished and placed, at \$18.00 per 1,000 feet.....	3,737 70
Hanging cap and furnishing 3 26-inch bolts.....	5 00
	<hr/>
	\$6,222 85
Paid Apr. 2, 1902.....	\$1,555 72
Paid Oct 2, 1902.....	1,555 71
Paid Jan. 2, 1903.....	1,555 71
Paid Apr. 2, 1903.....	1,555 71
	<hr/>
	\$6,222 85

EXHIBIT K—*Continued.*

Constructing building on bulkhead between Piers Nos. 9 and 11.
Fred Miller, contractor. Date of contract, February 12, 1902.

Contract price.....	\$7,387 00	
Extra work, May 2, 1902.....	32 50	
		\$7,419 50
Paid Mar. 28, 1902.....	\$1,108 05	
Paid May 7, 1902.....	738 70	
Paid May 7, 1902.....	32 50	
Paid Nov. 7, 1902.....	1,846 75	
Paid Feb. 7, 1903.....	1,846 75	
Paid May 7, 1903.....	1,846 75	
		\$7,419 50

Constructing a clamshell dredger. J. H. Bruce, contractor. Date of contract, March 19, 1902.

Contract price.....		\$37,400 00
Paid Oct. 29, 1902.....	\$7,012 50	
Paid Mar. 11, 1903.....	2,337 50	
Paid June 11, 1903.....	9,350 00	
Paid July 1, 1903—By D. P. Draft No. 133, due Sept. 11, 1903.....	9,350 00	
Paid July 1, 1903—By D. P. Draft No. 134, due Dec. 11, 1903.....	9,350 00	
		\$37,400 00

Repairing the Fishermen's breakwater at Section "B" of Seawall.
Coast Construction Co., contractors. Date of contract, April 30, 1902.

Contract price.....	\$2,940 00
This contract was canceled October 15, 1902. (See Vol. 15 of Records, page 378.)	

Repairing the spring fender line at Pier No. 7 (Pacific Street Wharf).
Jas. A. McMahon, contractor. Date of contract, April 30, 1902.

Contract price—	
Furnishing, driving, and fastening piles, \$16.50 per pile.	
Furnishing and fastening lumber, \$35.30 per 1,000 feet.	
Work done September 17, 1902—	
150 piles furnished and fastened, at \$16.50 per pile..	\$2,475 00
12,008 feet lumber furnished and fastened, at \$35.30 per 1,000 feet.....	423 88
	\$2,898 88
Paid Sept. 17, 1902.....	2,898 88

EXHIBIT K—*Continued.*

Repiling and repairing the wharf along Section No. 1 and Section No. 2, Seawall. Darby Laydon, contractor. Date of contract, May 23, 1902.

Contract price—

Furnishing, driving and fastening piles, \$1.85 per pile.

Furnishing and fastening lumber, \$18.55 per 1,000 feet.

Work done August 20, 1902—

418 piles furnished and fastened, at \$7.85 per pile...	\$3,281 30	
150,920 feet lumber, furnished and fastened, at \$18.55 per 1,000 feet.....	2,799 57	\$6,080 87

Less—

1,220 lineal feet of piling furnished by the Board, at 13 cts. per foot.....	\$158 60	
Towage of same.....	4 90	163 50
		\$5,917 37

Paid July 2, 1902.....	\$526 25	
Paid July 24, 1902.....	406 81	
Paid Aug. 20, 1902.....	546 28	
Paid Feb. 20, 1903.....	1,479 34	
Paid May 20, 1903.....	1,479 34	
Paid July 1, 1903—By D. P. Draft No. 96, due Aug. 20, 1903.....	1,479 35	\$5,917 37

Repiling and repairing Pier No. 6 (Howard Street Wharf No. 1). Darby Laydon, contractor. Date of contract, May 23, 1902.

Contract price—

Furnishing, driving and fastening piles, \$12.00 per pile.

Furnishing and fastening lumber, \$18.05 per 1,000 feet.

Work done August 20, 1902—

325 piles furnished and fastened, at \$12.00 per pile..	\$3,900 00	
270,450 feet lumber furnished and fastened, at \$18.05 per 1,000 feet.....	4,917 72	
40 old piles pulled under and bolted, at \$1.50 per pile	60 00	\$8,877 72

Paid July 2, 1902.....	\$1,322 00	
Paid July 24, 1902.....	857 84	
Paid Aug. 20, 1902.....	39 59	
Paid Feb. 20, 1903.....	2,219 43	
Paid May 20, 1903.....	2,219 43	
Paid July 1, 1903—By D. P. Draft No. 94, due Aug. 20, 1903.....	2,219 43	\$8,877 72

Electrical wire system on tower of Ferry Building. Novelty Sign Co., contractors. Date of contract, June 4, 1902.

Contract price.....	\$2,878 00
Paid June 18, 1902.....	\$2,158 50
Paid July 23, 1902.....	719 50
	\$2,878 00

EXHIBIT K—*Continued.*

Dry Dock wharves in Central Basin. San Francisco Dry Dock Co.,
contractors. Date of contract, June 11, 1902.

Contract price-----	\$79,206 00
Work accepted April 18, 1903, and lease for five years given San Francisco Dry Dock Co. for sum of -----	48,000 00
Balance due contractors-----	\$31,206 00
Paid July 1, 1903—By D. P. Draft 167, due July 18,'03.	\$1,560 30
Paid July 1, 1903—By D. P. Draft 168, due Oct. 18,'03.	1,560 30
Paid July 1, 1903—By D. P. Draft 169, due Jan. 18,'04.	1,560 30
Paid July 1, 1903—By D. P. Draft 170, due Apr. 18,'04.	1,560 30
Paid July 1, 1903—By D. P. Draft 171, due July 18,'04.	1,560 30
Paid July 1, 1903—By D. P. Draft 172, due Oct. 18,'04.	1,560 30
Paid July 1, 1903—By D. P. Draft 173, due Jan. 18,'05.	1,560 30
Paid July 1, 1903—By D. P. Draft 174, due Apr. 18,'05.	1,560 30
Paid July 1, 1903—By D. P. Draft 175, due July 18,'05.	1,560 30
Paid July 1, 1903—By D. P. Draft 176, due Oct. 18,'05.	1,560 30
Paid July 1, 1903—By D. P. Draft 177, due Jan. 18,'06.	1,560 30
Paid July 1, 1903—By D. P. Draft 178, due Apr. 18,'06.	1,560 30
Paid July 1, 1903—By D. P. Draft 179, due July 18,'06.	1,560 30
Paid July 1, 1903—By D. P. Draft 180, due Oct. 18,'06.	1,560 30
Paid July 1, 1903—By D. P. Draft 181, due Jan. 18,'07.	1,560 30
Paid July 1, 1903—By D. P. Draft 182, due Apr. 18,'07.	1,560 30
Paid July 1, 1903—By D. P. Draft 183, due July 18,'07.	1,560 30
Paid July 1, 1903—By D. P. Draft 184, due Oct. 18,'07.	1,560 30
Paid July 1, 1903—By D. P. Draft 185, due Jan. 18,'08.	1,560 30
Paid July 1, 1903—By D. P. Draft 186, due Apr. 18,'08.	1,560 30
	<hr/> \$31,206 00

Repiling and repairing Pier No. 4 (Mission Street Wharf No. 2).
S. D. Le Clair, contractor. Date of contract, June 11, 1902.

Contract price—	
Furnishing, driving, and fastening piles, \$24.25 per pile.	
Furnishing and fastening lumber, \$25.00 per 1,000 feet.	
Furnishing and fastening compound stringers, \$34.50 per 1,000 feet.	
Work done September 3, 1902—	
41 piles furnished and fastened, at \$24.25 per pile...	\$994 25
65,122 feet lumber furnished and fastened, at \$25.00 per 1,000 feet.	1,628 05
9,480 feet compound stringers furnished and fast- ened, at \$34.50 per 1,000 feet.....	327 06
1 mooring butt furnished and fastened	5 00
14 caps gained and spliced, at \$3.00 per cap.....	42 00
	<hr/> \$2,996 36
Paid September 3, 1902.....	\$749 09
Paid July 1, 1902—By D. P. Draft 98, due Sept. 3,'03.	2,247 27
	<hr/> \$2,996 36

EXHIBIT K—Continued.

Dredging at Third and Channel streets and Sixth and Channel streets.

Pacific Coast Dredging and Reclamation Co., contractors.

Informal bid. Mud 10 cents per cubic yard.

Work done June 11, 1902—

Third and Channel streets—120¼ scows of soft mud (200 cu. yds. each), 724,050 cu. yds., at 10 cents per cu. yd.	\$2,405 00	
Sixth and Channel streets—11 scows of sand and gravel (200 cu. yds. each), 2,200 cu. yds., at 15 cents per cu. yd.	330 00	\$2,735 00
Paid June 11, 1902	\$2,051 25	
Paid July 17, 1902	683 75	\$2,735 00

Constructing shed on Pier No. 19 (Union Street Wharf No. 2). Hannah Bros., contractors. Date of contract, December 16, 1901.

Contract price	\$12,773 00	
Paid Feb. 12, 1902	\$4,789 88	
Paid Apr. 16, 1902	2,873 92	
Paid May 1, 1902	1,915 95	
Paid Oct. 6, 1902	3,193 25	\$12,773 00

Repairing the spring line of Second Street Car Ferry Slip. Robert Wakefield, contractor. Date of letter of agreement, June 18, 1902.

Contract price—

Furnishing, driving and fastening spring piles, \$20 per pile.

Furnishing and fastening lumber (ribbing and
chocks), \$40 per 1,000 feet (B. M.)

Work done July 2, 1902—

71 spring piles furnished and fastened, at \$20 per pile	\$1,420 00	
14,917 feet lumber furnished and fastened at \$40 per 1,000 feet	596 68	\$2,016 68
Paid July 2, 1902		2,016 68

Repairing bulkhead between Piers Nos. 25 and 27. Robert Wakefield, contractor. Date of informal bid, April 12, 1902.

Contract price—

Furnishing, driving and fastening piles, \$9.50 per pile.

Furnishing and fastening lumber, \$22 per 1,000 feet.

Work done July 16, 1902—

107 piles furnished and fastened, at \$9.50 per pile...	\$1,016 50	
73,073 feet lumber furnished and fastened, at \$22 per 1,000 feet	1,607 61	\$2,624 11
Less 1,376 lineal feet piling furnished by the Board, at 14 cents per lineal foot		192 64
		\$2,431 47
Paid July 17, 1902		2,431 47

EXHIBIT L.

Work Contracted for and Completed within the Years June 30, 1902, and July 1, 1904.

Erecting an office building on Pier No. 2 (Mission Street Wharf No. 1). Hatch Bros., contractors. Date of contract, July 9, 1902.

Contract price.....	\$800 00
Paid September 10, 1902	800 00

Electric wire system on tower of Ferry Building. Novelty Sign Co., contractors. Date of contract, July 9, 1902.

Contract price.....	\$822 00
Paid November 21, 1902	822 00

Reconstructing the spring lines of Ferry Slip No. 2. James A. McMahon, contractor. Date of contract, July 16, 1902.

Contract price—

Furnishing, driving, and fastening standard piles, \$19.45 per pile.

Furnishing, driving, and fastening spring and cluster piles, \$19.45 per pile.

Furnishing, fitting, and fastening chocks, ribbing, and sheathing, \$41.85 per 1,000 feet (B. M.).

Work done October 15, 1902—

297 standard and spring piles furnished and fastened, at \$19.45 per pile	\$5,776 65	
38,300 feet (B. M.) chocks, ribbing and sheathing furnished and fastened, at \$41.85 per 1,000 feet....	1,602 85	
576 lineal feet of 14-inch piling furnished and fastened, at 15 cents per lineal foot.....	86 40	
		\$7,465 90
Paid by D. P. Draft No. 100, due Oct. 15, 1903	\$1,866 47	
Paid by D. P. Draft No. 101, due Jan. 15, 1904	1,866 47	
Paid by D. P. Draft No. 102, due Apr. 15, 1904	1,866 48	
Paid by D. P. Draft No. 103, due July 15, 1904	1,866 48	
		\$7,465 90

Paving sidewalk on Sansome street, between Chestnut and Lombard streets. City Street Improvement Co., contractors. Date of contract, July 16, 1902.

Contract price, 21½ cents per square foot. (Area to be paved, about 4,500 square feet.)

Work done August 29, 1902—

4,583.75 square feet, at 21½ cents per square foot	\$985 50
Paid September 10, 1902	985 50

EXHIBIT L—Continued.

Blasting rock at Harrison Street Wharf. City Street Improvement Co., contractors. Date of contract, July 23, 1902.

Contract price.....	\$2,350 00
Paid April 4, 1903.....	2,350 00

Constructing a shed on Pier No. 23 (Greenwich Street Wharf No. 1). Hannah Bros., contractors. Date of contract, July 30, 1902.

Contract price.....	\$14,973 00
Addition to contract, December 8, 1902.....	208 00
Total amount of contract.....	\$15,181 00
Paid by D. P. Draft No. 122, due Sept. 17, 1903.....	\$3,795 25
Paid by D. P. Draft No. 123, due Dec. 17, 1903.....	3,795 25
Paid by D. P. Draft No. 124, due Mar. 17, 1904.....	3,795 25
Paid by D. P. Draft No. 125, due June 17, 1904.....	3,795 25
	\$15,181 00

Furnishing cement for constructing Pier No. 9 (Broadway Wharf No. 1). Flinn & Treacy, contractors. Date of contract, August 6, 1902.

Contract price, \$12.75 per ton of 2,000 pounds. Estimated amount 700 tons (more or less).	
Feb. 25, 1903, cement furnished, 735.68 tons, at \$12.75 per ton.....	\$9,379 92
Paid by D. P. Draft No. 128, due May 25, 1903.....	\$2,344 98
Paid by D. P. Draft No. 129, due Aug. 25, 1903.....	2,344 98
Paid by D. P. Draft No. 130, due Nov. 25, 1903.....	2,344 98
Paid by D. P. Draft No. 131, due Feb. 25, 1904.....	2,344 98
	\$9,379 92

Reconstructing a portion of Pier No. 8 (Howard Street Wharf No. 2). City Street Improvement Co., contractors. Date of contract, October 8, 1902.

Contract price.....	\$5,874 00
Addition to contract (extending structure pro rata 26 ft.).....	664 02
Total amount of contract.....	\$6,538 02
Paid by D. P. Draft No. 126, due Feb. 4, 1904.....	\$3,269 01
Paid by D. P. Draft No. 127, due Aug. 4, 1904.....	3,269 01
	\$6,538 02

Creosoting piles for reconstructing a portion of Pier No. 8 (Howard Street Wharf No. 2). San Francisco Timber Preserving Co., contractors. Date of contract, October 15, 1902.

Contract price—

12-in. piles with 10 lbs. creosote injected, 25 cents per lineal foot.	
13-in. piles with 10 lbs. creosote injected, 27 cents per lineal foot.	
14-in. piles with 10 lbs. creosote injected, 31 cents per lineal foot.	
15-in. piles with 10 lbs. creosote injected, 34 cents per lineal foot.	
16-in. piles with 10 lbs. creosote injected, 38 cents per lineal foot.	
17-in. piles with 10 lbs. creosote injected, 42 cents per lineal foot.	

Work done Nov. 13, 1902—

115 12-in. piles creosoted, 7,783 ft., at 25 cents.....	\$1,945 75
116 13-in. piles creosoted, 7,849 ft., at 27 cents.....	2,119 23
39 14-in. piles creosoted, 2,992 ft., at 31 cents.....	927 52
21 15-in. piles creosoted, 1,716 ft., at 34 cents.....	583 44

291 piles.	20,340 ft.	\$5,575 94
Paid by D. P. Draft No. 120, due Nov. 26, 1903.....	\$2,787 97	
Paid by D. P. Draft No. 121, due May 26, 1904.....	2,787 97	
		\$5,575 94

EXHIBIT L—*Continued.*

Reconstructing portions of spring line of Ferry Slip No. 3. Dundon Bridge and Construction Co., contractors. Date of contract, October 29, 1902.

Contract price—

Furnishing and driving standard piles, \$12 per pile.
 Furnishing and driving spring and dolphin piles, \$17.50 per pile.
 Furnishing and fastening ribbing, chocks, etc., \$36 per 1,000 feet.
 Pulling and redriving old piles, \$5 per pile.
 Refitting and relaying old lumber, \$20 per 1000 feet.

Work done March 11, 1903—

273 spring piles, furnished, driven and fastened, at \$17.50 per pile	\$4,777 50
30 standard piles furnished, driven and fastened, at \$12 per pile	360 00
36,000 ft. new lumber furnished and fastened, at \$36 per 1,000 ft.	1,296 00
4,400 ft. old lumber relaid and fastened, at \$20 per 1,000 ft.	88 00
14 old piles pulled and redriven, at \$5 per pile	70,00
	<hr/> \$6,591 50

Less 5 piles (280 ft.), at 12 cents per ft. \$33 60

Towage on same

36 10

\$6,555 40

Paid by D. P. Draft No. 135, due Dec. 11, 1903..... \$1,092 56

Paid by D. P. Draft No. 136, due Mar. 11, 1904..... 1,092 56

Paid by D. P. Draft No. 137, due June 11, 1904..... 1,092 57

Paid by D. P. Draft No. 138, due Sept. 11, 1904..... 1,092 57

Paid by D. P. Draft No. 139, due Dec. 11, 1904..... 1,092 57

Paid by D. P. Draft No. 140, due Mar. 11, 1905.... 1,092 57

\$6,555 40

Constructing two mud scows. J. H. Bruce, contractor. Date of contract, October 29, 1903.

Contract price	\$15,974 00
Paid by D. P. Draft No. 141, due Dec. 18, 1903.....	\$2,662 33
Paid by D. P. Draft No. 142, due Mar. 18, 1904	2,662 33
Paid by D. P. Draft No. 143, due June 18, 1904	2,662 33
Paid by D. P. Draft No. 144, due Sept. 18, 1904	2,662 33
Paid by D. P. Draft No. 145, due Dec. 18, 1904	2,662 34
Paid by D. P. Draft No. 146, due Mar. 18, 1905	2,662 34
	<hr/> \$15,974 00

Repairing approach to new Dry Dock wharves. Dundon Bridge and Construction Co., contractors. Date of contract, October 29, 1902.

Contract price—

Furnishing and driving piles, \$7.25 per pile.
 Furnishing and fastening new lumber, \$21 per 1,000 feet.
 Relaying and refastening old lumber, \$5 per 1,000 feet.

Work done January 23, 1903—

48 piles furnished and driven, at \$7.25 per pile	\$609 00
54,968 feet new lumber furnished and fastened, at \$21 per 1,000 feet	1,154 33
6,928 feet old lumber relaid and refastened, at \$5 per 1,000 feet	34 64

\$1,797 97

1,797 97

Paid February 9, 1903

EXHIBIT L—*Continued.*

Furnishing rock for Fishermen's Breakwater. Flinn & Treacy, contractors. Date of contract, November 5, 1902.

Contract price.....		\$4,900 00
Paid by D. P. Draft No. 187, due May 20, 1904	\$2,450 00	
Paid May 27, 1903 (demand warrant)	2,450 00	
		\$4,900 00

Whitewashing shed on Pier No. 23 (Greenwich Street Wharf No. 1). Chas. C. Venn, contractor. Date of contract, December 3, 1902.

Contract price.....	\$473 00
Paid Dec. 27, 1902.....	473 00

Work on approach to Steuart Street Wharf. Darby Laydon, contractor. Date of bid (informal), October 4, 1902.

Contract price—	
New lumber placed, \$21 per 1,000 feet.	
Old lumber relaid, \$6 per 1,000 feet.	
Piles, 12-in. butts, 55 to 60 ft. long, furnished and driven, \$11 per pile.	
Work done November 25, 1902—	
24 piles furnished and fastened, at \$11 per pile.....	\$264 00
28,612 feet lumber (new) placed, at \$21 per 1,000 feet	600 85
18,850 feet lumber (cedar) placed, at \$6 per 1,000 feet	113 10
Also following extra work under shed:	
11 piles driven and fastened, at \$18.80 per pile.....	206 80
18,220 feet lumber (new) placed, at \$21 per 1,000 feet	382 62
Raising and blocking-up shed and placing 140 feet of sub-cap.....	200 00
	\$1,767 37
Less 1,973 lineal feet of piling furnished by the Board, at 12 cents per foot	236 76
Paid November 26, 1902	\$1,530 61
	1,530 61

Erecting shed on Pier No. 9 (Broadway Wharf No. 2). F. H. Masow, contractor. Date of contract, January 13, 1903.

Contract price.....	\$20,995 00
Paid by D. P. Draft No. 192, due Apr. 1, 1904	\$3,499 17
Paid by D. P. Draft No. 193, due July 1, 1904	3,499 17
Paid by D. P. Draft No. 194, due Oct. 1, 1904	3,499 17
Paid by D. P. Draft No. 195, due Jan. 1, 1905	3,499 17
Paid by D. P. Draft No. 196, due Apr. 1, 1905	3,499 16
Paid by D. P. Draft No. 197, due July 1, 1905	3,499 16
	\$20,995 00

Repairing Pier No. 8 (Howard Street Wharf No. 2). City Street Improvement Co., contractors. Date of letter of agreement, December 22, 1902.

Contract price—	
Driving and fastening piles, \$6 per pile.	
Furnishing and fastening new lumber, \$24 per 1,000 feet.	
Work done February 4, 1903—	
125 piles driven and fastened, at \$6 per pile.....	\$750 00
63,702 feet lumber furnished and fastened, at \$24 per 1,000 feet	1,528 85
12 caps rejoined with cap dogs, at \$1.50 each	18 00
Paid February 9, 1903	\$2,296 85
	2,296 85

EXHIBIT L—Continued.

Repiling and repairing Pier No. 3 (Washington Street Wharf).
Darby Laydon, contractor. Date of contract, February 4, 1903.

Contract price—

Furnishing, driving, and fastening fender piles, \$12 per pile.
Furnishing, driving, and fastening standard piles, \$12 per pile.
Furnishing, fitting, and fastening new lumber, \$20 per 1,000 feet.

Work done March 30, 1903—

168 standard piles furnished and driven, at \$12 per pile.....	\$2,016 00	
7 fender piles furnished and driven, at \$12 per pile..	84 00	
110,402 feet new lumber furnished and fastened, at \$20 per 1,000 feet	2,208 04	
19 old piles rebolted, at \$1.50 per pile	28 50	
2 office buildings and corral removed	45 00	
		\$4,381 54
Paid by D. P. Draft No. 147, due Sept. 30, 1903.....	\$1,095 38	
Paid by D. P. Draft No. 148, due Dec. 30, 1903.....	1,095 38	
Paid by D. P. Draft No. 149, due Mar. 30, 1904.....	1,095 39	
Paid by D. P. Draft No. 150, due June 30, 1904.....	1,095 39	
		\$4,381 54

Erecting Ferry Slip "A," apron and hoisting frame. Robert Wakefield, contractor. Date of contract, March 11, 1903.

Contract price.....		\$56,500 00
Paid Aug. 19, 1903 (demand warrant)	\$3,390 00	
Paid Sept. 24, 1903 (demand warrant)	2,825 00	
Paid Nov. 11, 1903 (demand warrant)	2,825 00	
Paid Dec. 11, 1903 (demand warrant)	2,260 00	
Paid by D. P. Draft No. 210, due Mar. 9, 1904	2,825 00	
Paid by D. P. Draft No. 211, due June 9, 1904	2,825 00	
Paid by D. P. Draft No. 212, due Sept. 9, 1904	2,825 00	
Paid by D. P. Draft No. 213, due Dec. 9, 1904	2,825 00	
Paid by D. P. Draft No. 214, due Mar. 9, 1905	2,825 00	
Paid by D. P. Draft No. 215, due June 9, 1905	2,825 00	
Paid by D. P. Draft No. 216, due Sept. 9, 1905	2,825 00	
Paid by D. P. Draft No. 217, due Dec. 9, 1905	2,825 00	
Paid by D. P. Draft No. 218, due Mar. 9, 1906	2,825 00	
Paid by D. P. Draft No. 219, due June 9, 1906	2,825 00	
Paid by D. P. Draft No. 220, due Sept. 9, 1906	2,825 00	
Paid by D. P. Draft No. 221, due Dec. 9, 1906	2,825 00	
Paid by D. P. Draft No. 222, due Mar. 9, 1907	2,825 00	
Paid by D. P. Draft No. 223, due June 9, 1907	2,825 00	
Paid by D. P. Draft No. 224, due Sept. 9, 1907	2,825 00	
Paid by D. P. Draft No. 225, due Dec. 9, 1907	2,825 00	
		\$56,500 00

Erecting hydraulic hoist and apron at Ferry Slip No. 1. Vulcan Iron Works, contractors. Date of contract, March 11, 1903.

Contract price.....	\$1,995 00	
Addition to contract, August 26, 1903.....	18 00	
		\$2,013 00
Paid Sept. 3, 1903	\$1,509 75	
Paid Oct. 7, 1903	503 25	
		\$2,013 00

EXHIBIT L—*Continued.*

Rebuilding bulkhead in front of Pier No. 9 (Broadway Wharf No. 1).
Hyde Construction Co., contractors. Date of contract, March 11, 1903.

Contract price—

Furnishing, driving, and fastening piles, \$7.30 per pile.

Furnishing, laying, and fastening pine lumber, \$22 per 1,000 feet.

Furnishing, laying, and fastening redwood lumber, \$30 per 1,000 feet.

Work done May 20, 1903—

63 piles furnished and fastened, at \$7.50 per pile....	\$622 50	
640 feet piling creosoted, furnished and fastened, at 12½ cents per foot	80 00	
50,950 feet pine lumber, furnished and fastened, at \$22 per 1,000 feet	1,120 90	
5,300 feet of redwood lumber, furnished and fastened, at \$30 per 1,000 feet	159 00	
Moving small office and blocking-up large office...	50 00	
		\$2,032 40
Paid May 27, 1903	\$1,524 30	
Paid June 30, 1903	508 10	
		\$2,032 40

Repairing driveway on Seawall Lot No. 12, etc. Flinn & Treacy,
contractors. Date of contract, March 11, 1903.

Contract price—

Filling, 30 cents per cubic yard.

Concrete, \$2.70 per cubic yard.

Paving, 5 cents per cubic yard.

Work done April 28, 1903—

Filling 467 cubic yards, at 30 cents per cubic yard ..	\$140 10	
Repaving 13,181 square feet, at 5 cents per square foot	659 05	
Concrete wall, 46.6 cubic yards, at \$2.70 per cu. yd...	125 82	
		\$924 97
Paid May 11, 1903		924 97

Repiling and repairing Pier No. 11 (Broadway Wharf No. 2) and
approach. S. D. LeClair, contractor. Date of contract, March 18, 1903.

Contract price—

Piles driven under shed, \$10.50 per pile.

Piles driven outside of shed, \$9.50 per pile.

New lumber used, \$24.35 per 1,000 feet.

Work done July 15, 1903—

317 piles driven under shed, at \$10.50 per pile	\$3,328 50	
343 piles driven outside of shed, at \$9.50 per pile...	2,308 50	
284,838 feet lumber used, at \$24.35 per 1,000 feet....	6,935 80	
		\$12,572 80
Paid by D. P. Draft No. 198, due Aug. 19, 1903	\$3,143 20	
Paid by D. P. Draft No. 199, due July 15, 1904	3,143 20	
Paid by D. P. Draft No. 200, due Jan. 15, 1905	3,143 20	
Paid by D. P. Draft No. 201, due July 15, 1905	3,143 20	
		\$12,572 80

EXHIBIT L—*Continued.*

Treating piles for repairing Pier No. 11 (Broadway Wharf No. 2) and approach. H. R. Rood & Co., contractors. Date of contract, March 18, 1903.

Contract price, 40 cents per lineal foot of pile treated.

Work done April 27, 1903—

9,240 feet of piles coated, at 40 cents per lineal foot.	\$3,696 00	
346 piles chamfered, at 15 cents each	51 90	
		\$3,747 90
Paid May 11, 1903	\$2,810 93	
Paid June 22, 1903	936 97	
		\$3,747 90

Foundation for upper deck landing between Ferry Slips Nos. 1 and 2. James A. McMahon, contractor. Date of contract, March 25, 1903.

Contract price		\$2,775 00
Paid June 22, 1903	\$2,081 25	
Paid July 29, 1903	693 75	
		\$2,775 00

Hydraulic hoist and apron, Ferry Slip "A." Vulcan Iron Works, contractors. Date of contract, April 1, 1903.

Contract price		\$2,789 00
Paid Dec. 12, 1903	\$2,091 75	
Paid Jan. 14, 1904	697 25	
		\$2,789 00

Office building on bulkhead between Piers Nos. 7 and 9. Thomas H. Day's Sons, contractors. Date of contract, April 20, 1903.

Contract price		\$4,075 00
Paid June 22, 1903	\$3,056 25	
Paid July 29, 1903	1,018 75	
		\$4,075 00

Shed over Pier No. 25 (Greenwich Street Wharf No. 2). James A. McMahon, contractor. Date of contract, April 20, 1903.

Contract price		\$14,735 00
Paid by D. P. Draft No. 202, due Apr. 14, 1904	\$1,841 88	
Paid by D. P. Draft No. 203, due July 14, 1904	1,841 88	
Paid by D. P. Draft No. 204, due Oct. 14, 1904	1,841 88	
Paid by D. P. Draft No. 205, due Jan. 14, 1905	1,841 88	
Paid by D. P. Draft No. 206, due Apr. 14, 1905	1,841 87	
Paid by D. P. Draft No. 207, due July 14, 1905	1,841 87	
Paid by D. P. Draft No. 208, due Oct. 14, 1905	1,841 87	
Paid by D. P. Draft No. 209, due Jan. 14, 1906	1,841 87	
		\$14,735 00

Additional cylinder piers (dolphin between Ferry Slips Nos. 1 and 2). James A. McMahon, contractor. Date of contract May 6, 1903.

Contract price		\$2,664 00
Paid June 22, 1903	\$1,998 00	
Paid July 29, 1903	666 00	
		\$2,664 00

EXHIBIT L—*Continued.*

Coating piles for repairing Spear Street Wharf, per order of Chief Engineer. H. R. Rood & Co., contractors. Date of contract, April 29, 1903.

Contract price, 40 cents per lineal foot of pile coated.

Work done May 18, 1903—

210 piles, 5,350 feet coated, at 40 cents per lineal foot \$2,140 00

210 piles chamfered, at 15 cents each 31 50

\$2,171 50

Paid May 27, 1903

2,171 50

Bituminous rock paving at Broadway Wharf No. 1 (Pier No. 9), Flinn & Treacy, contractors. Date of contract, May 27, 1903.

Contract price, 6.9 cents per square foot.

Work done July 22, 1903—

30,761.86 square feet, at 6.9 cents per square foot \$2,122 57

Paid July 29, 1903 \$1,591 92

Paid Sept. 3, 1903 530 65

\$2,122 57

Renewing dolphins between Ferry Slips Nos. 1 and 2. James A. McMahon, contractor. Date of contract, June 10, 1903.

Contract price, \$29 per 1,000 feet (B. M.) lumber used.

Work done July 1, 1903—

81,216 feet (B. M.) lumber placed, at \$29 per 1,000 feet \$2,355 26

Paid July 29, 1903 \$1,766 45

Paid Aug. 12, 1903 588 81

\$2,355 26

Whitewashing shed on Pier No. 9 (Broadway Wharf No. 1). Taylor & Brickley, contractors. Date of contract, July 8, 1903.

Contract price..... \$425 00

Paid July 15, 1903 \$318 75

Paid Sept. 3, 1903..... 106 25

\$425 00

Reconstructing a portion of Pier No. 4 (Mission Street Wharf No. 2). James A. McMahon, contractor. Date of contract, July 1, 1903.

Contract price..... \$10,685 00

Paid Oct. 29, 1903 \$8,013 75

Paid Dec. 7, 1903..... 2,671 25

\$10,685 00

Cement for reconstructing Pier No. 4 (Mission Street Wharf No. 2). J. D. Spreckels & Bros., contractors. Date of contract, July 1, 1903.

Contract price, \$11.90 per ton of 2,000 pounds.

Work done October 28, 1903—

109,145 tons at \$11.90 per ton \$1,298 83

Paid November 11, 1903 \$974 13

Paid December 10, 1903 324 70

\$1,298 83

EXHIBIT L—Continued.

Repiling and repairing Pier No. 34 (Fremont Street Wharf). S. D. Le Clair, contractor. Date of contract, July 15, 1903.

Contract price—

Furnishing and driving piles, \$9.10 per pile.
Furnishing and fastening new lumber, \$23.50 per
1,000 feet (B. M.).

Work done November 4, 1903—

369,700 feet (B. M.) lumber furnished and fastened, at \$23.50 per 1,000 feet	\$8,687 95	
250 piles furnished and fastened, at \$9.10 per pile ..	2,275 00	
15 piles furnished by the Board, at \$4 per pile. . .	60 00	
4½ days' work one man lagging old mooring piles, at \$4 per day	18 00	
1 day's work one man splicing sub-cap, at \$4 per day,	4 00	
Rebolting 1,144 feet (B. M.) stringers, at \$6 per 1,000 feet	6 86	
		\$11,051 81
Paid November 11, 1903	\$8,288 86	
Paid December 11, 1903	2,762 95	
		\$11,051 81

Constructing an addition to Pier No. 11 (Broadway Wharf No. 2). City Street Improvement Co., contractors. Date of contract, July 7, 1903.

Contract price		\$13,697 00
Paid Oct. 22, 1903	\$10,272 75	
Paid Nov. 4, 1903	3,424 25	
		\$13,697 00

Constructing an addition to shed on Pier No. 11 (Broadway Wharf No. 2). Fred Miller, contractor. Date of contract, July 8, 1903.

Contract price		\$4,533 00
Paid Jan. 14, 1904	\$3,399 75	
Paid Feb. 18, 1904	1,133 25	
		\$4,533 00

Cement for constructing Ferry Slip "A." E. B. & A. L. Stone Co., contractors. Date of contract, July 22, 1903.

Contract price, \$11.72 per ton of 2,000 pounds.

Cement furnished—

October 13, 1903, 56 tons, at \$11.72 per ton	\$656 32	
October 14, 1903, 255 tons, at \$11.72 per ton	2,988 60	
		\$3,644 92
Paid Oct. 22, 1903	\$656 32	
Paid Oct. 22, 1903	2,241 45	
Paid Nov. 24, 1903	747 15	
		\$3,644 92

Whitewashing shed on Pier No. 25 (Greenwich Street Wharf No. 2). Taylor & Brickley, contractors. Date of contract, August 18, 1903.

Contract price		\$267 00
Paid Sept. 23, 1903	\$200 25	
Paid Nov. 11, 1903	66 75	
		\$267 00

EXHIBIT L—*Continued.*

Repiling and repairing a portion of Hay Wharf. Hyde Construction Co., contractors. Date of contract, October 21, 1903.

Contract price—

Furnishing, driving and fastening piles, \$9 per pile.

Furnishing, fitting and fastening new lumber, \$23 per 1,000 feet (B. M.).

Work done December 2, 1903—

56 piles furnished and fastened, at \$9 per pile..... \$504 00

108,500 feet lumber furnished and fastened, at \$23 per 1,000 feet..... 2,495 50

Paid Dec. 10, 1903..... \$2,249 62

Paid Jan. 8, 1904..... 749 88

\$2,999 50

Constructing an addition to Little Main Wharf. Healy, Tibbitts & Co., contractors. Date of contract, November 25, 1903.

Contract price..... \$19,897 00

Paid Feb. 18, 1904..... \$14,922 75

Paid Mar. 29, 1904..... 4,974 25

\$19,897 00

Crank shaft and three journals on tug "Gov. Irwin." Risdon Iron and Locomotive Works, contractors. Date of contract, November 25, 1903.

Contract price..... \$829 00

Paid January 27, 1904..... 829 00

Repiling and repairing outer ends of Pier No. 14 (Folsom Street Wharf No. 2) and Pier No. 16 (Harrison Street Wharf). Darby Laydon, contractor. Date of contract, December 2, 1903.

Contract price—

Furnishing, fitting and fastening 101 piles, \$19.75 per pile.

Furnishing, fitting and fastening 32,000 feet new lumber, \$28 per 1,000 feet (B. M.)

Relaying and fastening 6,000 feet old lumber, \$6 per 1,000 feet (B. M.)

Work done January 27, 1904—

101 piles furnished, driven and fastened, at \$19.75 per pile..... \$1,994 75

31,652 feet lumber (new) furnished and fastened, at \$28 per 1,000 feet..... 886 26

10,078 feet lumber (old) relaid and fastened, at \$6 per 1,000 feet..... 72 47

10 old piles rebolted, at \$1.50 per pile..... 15 00

Paid Jan. 28, 1904..... \$2,226 36

Paid Mar. 5, 1904..... 742 12

\$2,968 48

Extending the north wing of Ferry Slip "A." Healy, Tibbitts & Co., contractors. Date of letter of agreement, February 26, 1904.

Work done March 9, 1904—

52 spring piles furnished, driven and fastened, at \$16.90 per pile..... \$878 80

4,240 feet (B. M.) ribbing and chocks furnished and fastened, at \$38 per 1,000 feet..... 161 12

Paid March 15, 1904..... \$1,039 92

1,039 92

EXHIBIT L—*Continued.*

Treating spring and cluster piles for spring lines of Ferry Slips Nos. 1, 3, 4, 6, and 7. H. R. Rood & Co., contractors. Date of contract, February 17, 1904.

Contract price, 40 cents per lineal foot of pile treated.

Work done June 14, 1904—

536 piles coated, coating 25 feet on each pile, equals 13,400 feet, at 40 cents		\$5,360 00
Paid June 18, 1904	\$1,340 00	
Paid balance in three D. P. drafts of \$1,340 each	4,020 00	
		<u>\$5,360 00</u>

Erecting a storehouse on bulkhead between Piers No. 7 and 9. Frank Gallagher, contractor. Date of contract, March 23, 1904.

Contract price		\$2,949 00
Paid May 5, 1904	\$2,211 75	
Paid June 10, 1904	737 25	
		<u>\$2,949 00</u>

Repairing Main Street Wharf and bulkhead, between Main and Beale streets. City Street Improvement Co., contractors. Date of contract, May 30, 1904.

Contract price—

New piles furnished, driven and fastened, \$9 per pile.

New lumber furnished and fastened, \$19.50 per 1,000 feet.

Old lumber refitted and fastened, \$8 per 1,000 feet.

Work done April 13, 1904—

56 piles furnished, driven and fastened, at \$9 per pile	\$504 00	
48,356 feet new lumber furnished and fastened, at \$19.50 per 1,000 feet	942 94	
13,835 feet old lumber refitted and fastened, at \$8 per 1,000 feet	110 68	
		<u>\$1,557 62</u>
Paid April 16, 1904	\$1,168 22	
Paid May 26, 1904	389 40	
		<u>\$1,557 62</u>

Repairing dolphin between Ferry Slips Nos. 5 and 6. Healy, Tibbitts & Co., contractors. Date of contract, April 22, 1904.

Contract price—

Pulling old piles, \$6 per pile.

Furnishing, driving and fastening spring piles, \$16.90 per pile.

Furnishing and fastening new lumber, \$38 per 1,000 feet (B. M.).

Work done June 1, 1904—

120 old piles pulled, at \$6 per pile	\$720 00	
67 spring piles furnished and fastened, at \$16.90 per pile	1,132 30	
7,736 feet new lumber furnished and fastened, at \$38 per 1,000 feet	293 97	
		<u>\$2,146 27</u>
Paid June 3, 1904		2,146 27

Removing skylights and replacing same with slate roof in east gallery of Ferry Building, as per order of the Board. Robert Greig, contractor. Date of order, May 26, 1904.

Work done June 8, 1904	\$1,450 00
Paid June 10, 1904	1,450 00

EXHIBIT M.

Work Contracted for Since June 30, 1902, but Not Yet Completed.

Slate roof on Union Depot and Ferry House. Robert Greig, contractor. Date of contract, October 21, 1903.

Contract price.....	\$29,850 00
Paid March 21, 1904.....	\$995 00
Paid April 30, 1904.....	995 00
Paid June 10, 1904.....	995 00
Paid June 24, 1904.....	995 00
	<hr/> \$3,980 00

A section of seawall, and wharf along same. Gray Bros., contractors. Date of contract, December 30, 1903.

Contract price—	
Stone for seawall, 97 cents per ton of 2,240 pounds (90,000 tons estimated).....	\$87,300 00
Wharf.....	6,100 00
Paid June 18, 1904.....	2,940 91

Constructing Southern Pacific Company's freight slip. Healy, Tibbitts & Co., contractors. Date of contract, January 6, 1904.

Contract price.....	\$63,873 00
Paid May 12, 1904.....	11,177 77

Creosoting piles and lumber for Southern Pacific Company's freight slip. Southern Pacific Co., contractors. Date of contract, February 3, 1904.

Contract price—	
12-in. piles, 25 cents per lineal foot of pile creosoted.	
13-in. piles, 27 cents per lineal foot of pile creosoted.	
14-in. piles, 30 cents per lineal foot of pile creosoted.	
15-in. piles, 32 cents per lineal foot of pile creosoted.	
16-in. piles, 35 cents per lineal foot of pile creosoted.	
\$25 per 1,000 feet (B. M.) for lumber.	

Repairing portions of spring lines and clusters of Ferry Slips Nos. 1, 3, 4, 6, and 7. Healy, Tibbitts & Co., contractors. Date of contract, February 3, 1904.

Contract price.....	\$20,961 30
Paid April 30, 1904.....	\$2,569 77
Paid June 3, 1904.....	1,154 99
Paid June 24, 1904.....	1,552 01
	<hr/> \$5,276 77

Marble staircase and rostrum at Union Ferry Depot. Western Iron Works, contractors. Date of contract, May 4, 1904.

Contract price.....	\$2,987 00
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Slating roofs over upper deck landings between Ferry Slips Nos. 4-5 and 5-6. Robert Greig, contractor. Date of letter of agreement, June 29, 1904.

Contract price.....	\$2,145 00
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EXHIBIT N.
Statement of Cost of Dredging, by years, commencing June 30, 1875.

Fiscal Year Ending—	Salaries of Employees.	Repairs.	Coal.	Ship Chandlery, Water, Etc., etc.	Miscellaneous, including Docking, Dredgers, Tugs, Scows.	Total.	No. Yards Dredged.	No. Hours Worked.	Cost per Cubic Yard, Cents.
June 30, 1875	\$11,663 97	\$10,362 99	\$8,639 00	\$1,386 64	\$1,301 25	\$33,835 71	303,429	2,348¾	10.76
June 30, 1876	11,932 98	7,639 43	8,224 04	1,600 85	1,905 74	31,363 19	342,638	2,634	9.15
June 30, 1877	11,980 99	4,041 44	5,971 71	1,592 10	1,676 79	25,253 03	280,197	2,478½	9.01
June 30, 1878	17,188 80	7,372 48	7,754 86	2,666 37	3,032 55	38,214 40	423,654	3,080	9.02
June 30, 1879	26,201 70	14,963 90	11,755 12	5,443 70	1,289 60	60,454 68	843,879	4,694	7.16
June 30, 1880	27,202 59	8,824 19	11,115 11	4,184 65	318 75	51,645 29	749,011	4,323	6.89
June 30, 1881	25,948 49	10,196 63	11,037 15	4,194 44	85 81	51,462 52	639,570	3,962½	7.02
June 30, 1882	25,860 00	9,556 57	8,925 33	4,101 10	300 45	48,743 45	635,322	3,639½	7.62
June 30, 1883	25,860 01	12,152 06	9,093 05	3,800 58	551 80	51,457 50	643,100	3,776½	8.13
June 30, 1884	26,358 00	20,906 35	9,838 60	3,627 45	50 00	60,780 40	680,700	3,663½	9.45
June 30, 1885	26,896 24	11,610 58	10,074 34	3,657 64	20 00	52,258 80	678,900	3,652½	7.68
June 30, 1886	26,634 65	6,293 18	9,886 55	3,841 02	20 00	46,675 40	601,800	3,758½	6.87
June 30, 1887	26,520 00	36,872 40	7,911 49	4,435 62	2,307 48	78,046 99	717,600	3,175½	12.97
June 30, 1888	27,787 00	10,264 87	11,339 27	4,154 26	537 30	54,082 70	536,800	3,797½	7.52
June 30, 1889	27,847 00	21,004 76	9,392 65	3,292 77	887 78	62,424 96	645,300	3,010	11.62
June 30, 1890	27,825 87	10,403 04	9,377 93	3,671 54	310 53	51,588 91	569,300	3,298	7.99
June 30, 1891	28,112 45	8,919 66	9,545 08	3,735 55	2,299 40	53,230 81	522,400	3,206½	9.35
June 30, 1892	28,151 00	14,121 49	10,163 75	3,736 01	528 12	56,081 70	641,400	3,568	10.73
June 30, 1893	27,655 72	12,858 62	8,596 79	3,533 20	1,362 00	54,006 33	677,200	3,127	8.44
June 30, 1894	28,350 30	17,505 81	8,931 46	3,099 10	471 00	58,357 67	637,600	3,743½	8.75
June 30, 1895	28,516 20	39,226 19	7,959 10	3,683 94	279 00	79,664 43	537,400	2,751	14.823
June 30, 1896	28,493 81	14,132 13	8,713 25	5,208 95	90 88	56,639 02	657,300	3,055	8.617
June 30, 1897	28,515 00	16,519 35	7,118 87	3,411 09	122 00	55,686 31	691,600	3,229	8.051
June 30, 1898	28,910 90	13,611 64	6,986 15	4,550 97	229 15	54,278 81	645,600	2,917	8.407
June 30, 1899	30,967 00	12,490 49	5,874 71	4,559 31	211 40	54,102 91	671,800	2,864	8.053
June 30, 1900	29,319 35	21,239 27	6,808 50	2,985 72	240 95	60,593 29	794,800	2,903	9.034
June 30, 1901	27,720 40	8,332 02	7,603 23	2,480 59	30 00	46,166 24	856,900	3,521½	5.808
June 30, 1902	32,012 05	15,679 90	8,256 21	3,329 91	216 80	59,494 87	810,400	3,808	7.341
June 30, 1903	34,260 50	12,359 60	8,816 91	3,359 58	77 40	58,873 99	856,900	4,367	6.87
June 30, 1904	38,727 10	51,693 10	10,473 26	6,078 04	62 85	107,034 35	1,046,240	4,722	10.23

EXHIBIT O.

REPORT OF ATTORNEY FOR THE BOARD.

SAN FRANCISCO, CAL., June 30, 1904.

To the Honorable the Board of State Harbor Commissioners:

GENTLEMEN: I hereby submit my report as attorney for the Board for the period beginning April 1, 1903, the date of my appointment, and ending June 30, 1904.

The extensive business of the Board has required of the attorney much time and attention. Aside from the actual litigation in the courts and the time necessary for the preparation of cases therein, the attorney is called upon almost daily for opinions in matters of more or less magnitude affecting the conduct of business on the water front. Upon the most important questions submitted to me, I have expressed my conclusions at length in writing.

In innumerable other instances my oral opinion has been given where questions arose in consultations with the Commissioners and the other officers of the Board and in meetings.

I have attended nearly every meeting of the Board, with the view not only of expediting business, but also of keeping in close touch with the affairs of the water front in detail and with the general policy of the Board.

I have recently completed, at the expense of considerable time and labor, a new compilation of the laws and statutes to date relating to the Board, with citations to Supreme Court decisions; and the same has been published in pamphlet form under your direction.

Patent Litigation.—The litigation between the Board and Howard C. Holmes and Carl Uhlig concerning the right of the Board to use in wharf construction what are known as "cylinder piers" is still unsettled. Messrs. Holmes and Uhlig brought suit in the United States Circuit Court against the members of the Board, asking damages for infringement of their patent in the sum of \$27,685.00. Upon the trial of this case, a verdict of \$5,000 was rendered by a jury in favor of the plaintiffs and against the Board. An appeal to the United States Circuit Court of Appeals was taken, the judgment was reversed, and the case was remanded for a new trial. The new trial resulted in favor of

the Board, and an appeal from this judgment was taken by the plaintiffs and has been argued and submitted, and at this date no decision has been rendered.

In the meantime, and prior to the last appeal mentioned, Holmes and Uhlig filed in the United States Circuit Court a bill in equity, involving the same questions which arose in the previous litigation and asking judgment for the same amount, to wit: \$27,685. To defend this action you employed Messrs. Wheaton and Kalloch, able patent lawyers, who have been and now are conducting the defense of the previous action of Holmes and Uhlig. This latter case has not progressed beyond the filing of a demurrer on behalf of the Board.

Owing to the importance of the question arising in this litigation and the great amount of money involved, this Board has used every endeavor to obtain an adjudication of the existing legal differences.

The Woodward Law.—The enforcement of the so-called "Woodward Law," regulating the sale of perishable products on the wharves and other State property in the City and County of San Francisco, has taken much time and attention of the Board and its attorney. Three public investigations of alleged violations of the Act by permit holders have been had. At the first investigation, held on December 3, 1903, the permits of Wetmore Bros., McDonogh & Runyon, Wolf & Sons, and L. Scatena & Co. were, after investigation, revoked and canceled. Injunction proceedings were brought by these four firms to restrain the Board from acting under its order of revocation. The case of Wetmore Bros. was tried (the other cases to abide by the decision in the Wetmore case) and the temporary injunction was made permanent, the court holding that no specific charge of violation of the Act had been made, no legal notice of a hearing had been given, and no legal hearing had been had. Attorney-General U. S. Webb and Judge Edwin A. Davis were requested by the Board to aid in defending these cases, and I desire at this time to express to them my thanks for their able and conscientious work in connection therewith. An appeal to the Supreme Court has been taken in these cases.

The second investigation, held on December 15, 1903, was conducted after specific charges had been filed and a notice of hearing given. As a result of this investigation, the permits of Sresovich & Co., Garcia & Maggini, Mitchell & Goodall, Berti & Co., and Ivancovich & Co. were revoked and canceled.

At the third investigation, held on June 9, 1904, the same procedure was followed and the permits of Wolf & Sons, L. Scatena & Co., and the American Produce Company were revoked and canceled.

In the case of Foster & Orear against the Board, the Court permanently enjoined the Board from ousting plaintiffs from the premises in

the Ferry Building. An appeal is to be taken to the Supreme Court from this decision.

There are no actions pending other than those above mentioned. Several accidents have occurred on the Belt Railway, some resulting in death, and I have, at the request of the Board, attended coroner's inquests in such cases to protect the interests of the Board and the State.

In each case where the employés of the Belt Railway have been arrested for manslaughter following a fatal accident I have appeared for the defendants, and in every instance they have been discharged.

The \$2,000,000 Bond Issue.—The many questions arising concerning the proposed \$2,000,000 bond issue for the purpose of constructing the seawall and appurtenances have occupied considerable of my time, with the end in view of securing the ultimate approval of this measure which means so much to the shipping and business interests of the State at large.

The Free Market Act.—The Board has been unable to follow the provisions of the free market act and establish the market provided for. Owing to the crowded condition of the water front there is no available site for the construction of a suitable building.

Insurance.—The insurance authorized by the Legislature to be placed on the improvements on the water front, to wit, \$550,000, is entirely inadequate, owing to the great value of structures and other improvements which have been erected since the passage of the Act above referred to (Statutes 1901, page 809). I suggest that at the next session of the Legislature an endeavor be made to obtain the approval of an amendment to said Act, permitting the Board to place additional insurance on the improvements mentioned,

Respectfully submitted.

WILLIAM H. DAVIS,
Attorney for the Board.

EXHIBIT P.

REPORT OF EXPERT ACCOUNTANT.

FAIR BUILDING, ROOM 32,
SAN FRANCISCO, AUGUST 31, 1904.

To the Honorable Board of State Harbor Commissioners, San Francisco, Cal.:

GENTLEMEN: The cash account of the State Board of Harbor Commissioners was balanced by me before the opening of business on July 1, 1904, which I followed up by examining the books and accounts for the quarter ending June 30, 1904, thus completing the examination for the two years ending on said date.

Hereunder I beg to submit a statement of each account as it appeared on the 30th of June, 1904:

CASH ACCOUNT.

Receipts for month of June, 1904	\$74,221 42
Credit tolls for the month	19 10
Unpaid wages	132 50
	<hr/>
	\$74,373 02

Which is accounted for as under—

Balance at the Crocker-Woolworth National Bank...	\$61,152 20
Urgent repairs paid in cash	4,637 04
Coin and checks found in safe	6,890 70
Payrolls, part payment	1,602 50
Bills paid not entered	90 58
	<hr/>
	\$74,373 02

Being authorized so to do, I ascertained the correctness of the bank balance by inquiry at said bank.

SAN FRANCISCO HARBOR IMPROVEMENT FUND.

1902, July 1—Balance in the fund, as per last Biennial Report..	\$70,099 21
1904, June 30—Remittances to State Treasurer, being total receipts for two years to date	<hr/> 1,660,199 60
	\$1,730,298 81
1904, June 30—Monthly appropriation of \$4,631 for San Francisco Depot Sinking Fund, as per act of Legislature, 24 months to date	<hr/> \$111,144 00
1904, June 30—Total drafts drawn against the fund for two years to date, less draft of \$88.60 dishonored	<hr/> 1,503,712 76
	<hr/> \$1,614,856 76
1904, July 1—Balance to the credit of the fund	\$115,442 05
Plus old difference	04

State Controller E. P. Colgan has kindly favored me with the balance of this account, as follows:

1904, June 30—Balance as per State Controller's books.....	\$58,050 05
Cash remittance to close June accounts.....	69,584 38
	<hr/>
	\$127,634 43
Less drafts drawn and unpaid.....	12,192 34
	<hr/>
	\$115,442 09

SAN FRANCISCO DEPOT SINKING FUND.

From information supplied per favor of State Treasurer, Truman Reeves, I give a synopsis of this account:

STATE TREASURER.

Dr.

1902, July 1—To balance, being amount not invested.....	\$32,953 68
1904, June 30—To interest on \$260,000 U. S. 4% bonds, 2 years.....	20,800 00
Monthly transfers from S. F. Impv. Fund as provided by Act of the Legislature, 24 months at \$4,631.....	111,144 00
	<hr/>
	\$164,897 68

Cr.

1904, June 30—By bond interest, four semi-annual payments of \$12,000, coupons 19, 20, 21, 22	\$48,000 00
By purchase of U. S. 4% bonds of 1925	5,000 00
By purchase of 7 U. S. 4% bonds, each \$10,000.....	70,000 00
By premium paid on bonds, at 132 $\frac{3}{4}$..	24,539 06
By brokerage, at $\frac{1}{8}$ %.....	93 75
By exchange, transportation, etc.	262 50
	<hr/>
	147,895 31
Cash balance to credit of fund.....	\$17,002 37
<i>Condition of Fund, June 30, 1904.</i>	
Par value of U. S. 4% bonds of 1907.....	\$70,000 00
Par value of U. S. 4% bonds of 1925.....	265,000 00
Cash on hand, as above.....	17,002 37
	<hr/>
Total in fund at par value.....	\$352,002 37

Outside the monthly appropriation of \$4,631, this fund has no mention on the books of the Harbor Commissioners, being handled solely by the State Treasurer.

All the financial statements appearing in your biennial report have been compared by me with your books and accounts, and are in strict consonance therewith.

In the course of my examinations, I have found a few unimportant omissions of official requirements susceptible of easy correction, but nothing affecting the finances, and the style and correctness of the accounts I consider highly creditable.

REMARKS.

The "time draft" feature (commercially speaking, "bills payable") works well and proves that governmental bodies may pattern after the business men and corporations of the world to advantage. The community is now enjoying the benefits arising from various construction work, which, under the old plan, would be delayed for years. Take, for instance, out of several, the new Pier No. 9, built on concrete piers 820 feet in length by a breadth of 124 feet; this would not have been called into existence for some considerable time without the aid of "time drafts."

A few words on the \$2,000,000 bond proposition may perhaps be in keeping. The voice of the people of California is asked to sanction the issuance of bonds to the extent of \$2,000,000 for the improvement of the San Francisco water front. Now, it is not known by many that the interest on these bonds puts no additional tax on the people and that it is paid out of the receipts of this department. If this is made plain to them, there is little fear of an adverse vote.

The projected improvements, *i. e.*, the building of a seawall in a straight line from Market-street Ferry Building to Channel street, a distance of about 4,400 feet, will make available for revenue a considerable area of land estimated at about 90,750 square superficial feet; this alone is calculated to produce an income of about \$60,000 a year. Now, this amount added to the increased revenue that will be derived from thirteen new wharves to be built on concrete piers and with all modern improvements will swell the receipts now obtained from the old tumble-down structures in sufficient measure to produce a big gain after paying interest on the bonds, besides offering the greatest boon to the marine interests of the city.

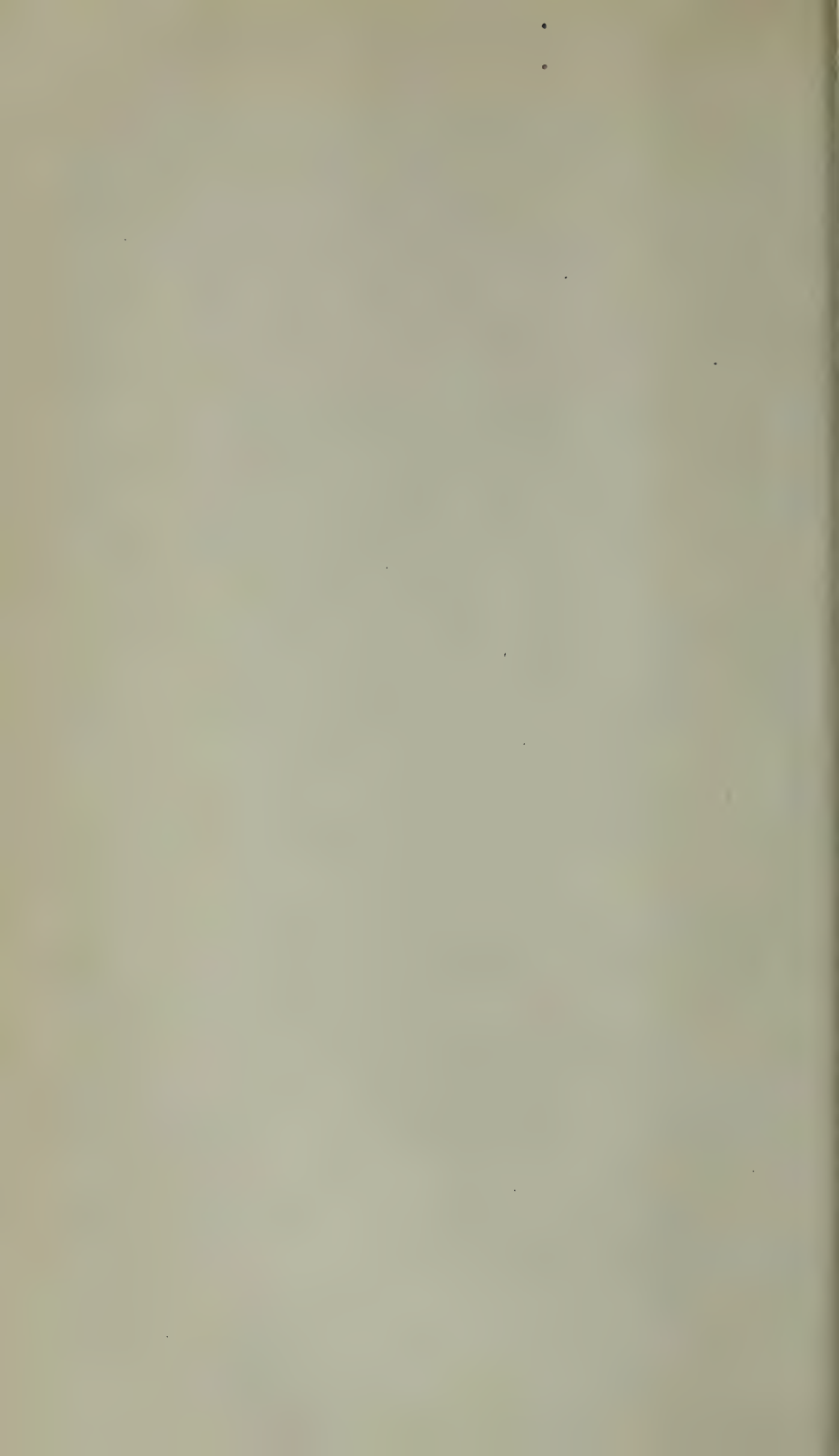
Present water front accommodations are entirely inadequate. The city grows apace, and everything must of necessity grow with it. The affairs of this world know no standstill; it is either go ahead or go back, and it is for us to choose the former.

It must be gratifying to you to find that there is a steady increase in the receipts of the department, the figures being as follows:

Total receipts for the two years ending June 30, 1904.....	\$1,660,199 60
Total receipts for the two years ending June 30, 1902.....	1,598,180 46
Increase.....	<u>\$62,019 14</u>

I am, gentlemen, yours faithfully,

JULIAN B. HARRIES,
Certified Public Accountant.



BIENNIAL REPORT

OF THE

Board of State Harbor Commissioners

FOR THE

BAY OF SAN DIEGO

OCTOBER 1, 1904.



SACRAMENTO:

W. W. SHANNON, : : : : : SUPERINTENDENT OF STATE PRINTING.
1904.



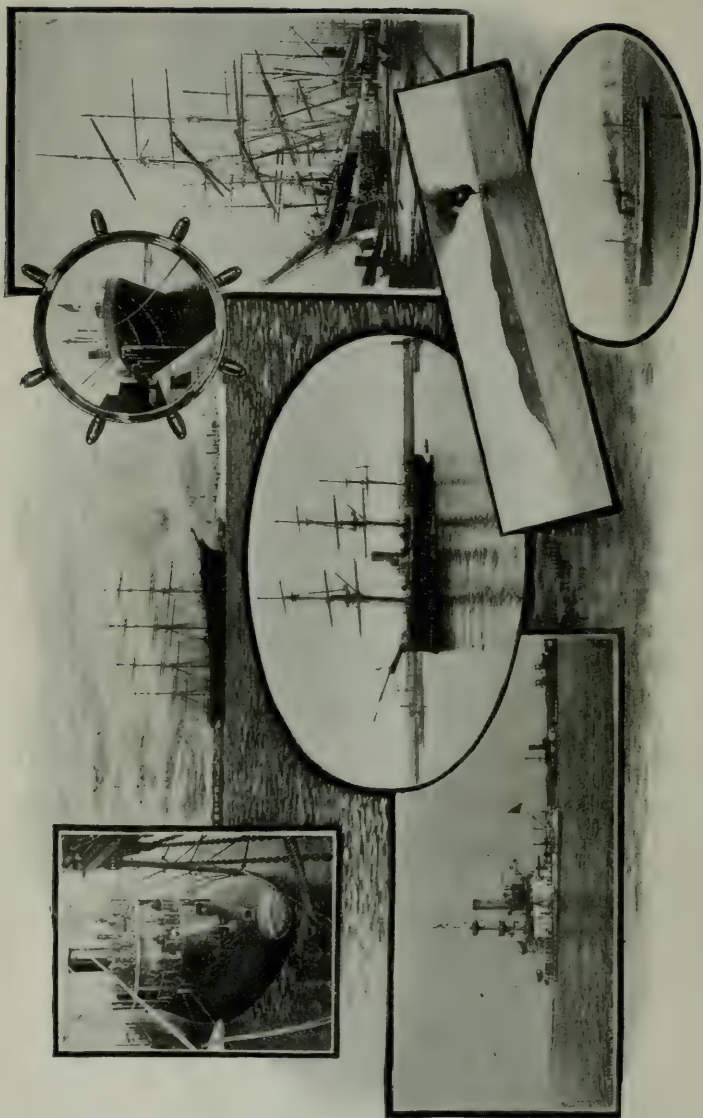
SAN DIEGO BAY.

BOARD OF STATE HARBOR COMMISSIONERS FOR THE BAY OF SAN DIEGO.

CAPT. W. H. PRINGLE.....San Diego.
CHAS. W. OESTING.....San Diego.
EUGENE DE BURN.....San Diego.

OFFICERS.

CHAS. W. OESTING.....President.
EUGENE DE BURN.....Secretary.
CAPT. W. H. PRINGLE.....Harbormaster.
VICTOR E. SHAW.....Attorney.
G. A. D'HEMECOURT.....Engineer.



ON SAN DIEGO BAY.

REPORT OF THE BOARD OF STATE HARBOR COMMISSIONERS FOR THE BAY OF SAN DIEGO.

SAN DIEGO, CAL., October 1, 1904.

To His Excellency, GEORGE C. PARDEE,
Governor of the State of California.

YOUR EXCELLENCY: In accordance with the provisions of Section 2592 of the Political Code, the Board of State Harbor Commissioners for the Bay of San Diego respectfully submits the following report for the period commencing March 24, 1903, and ending October 1, 1904.

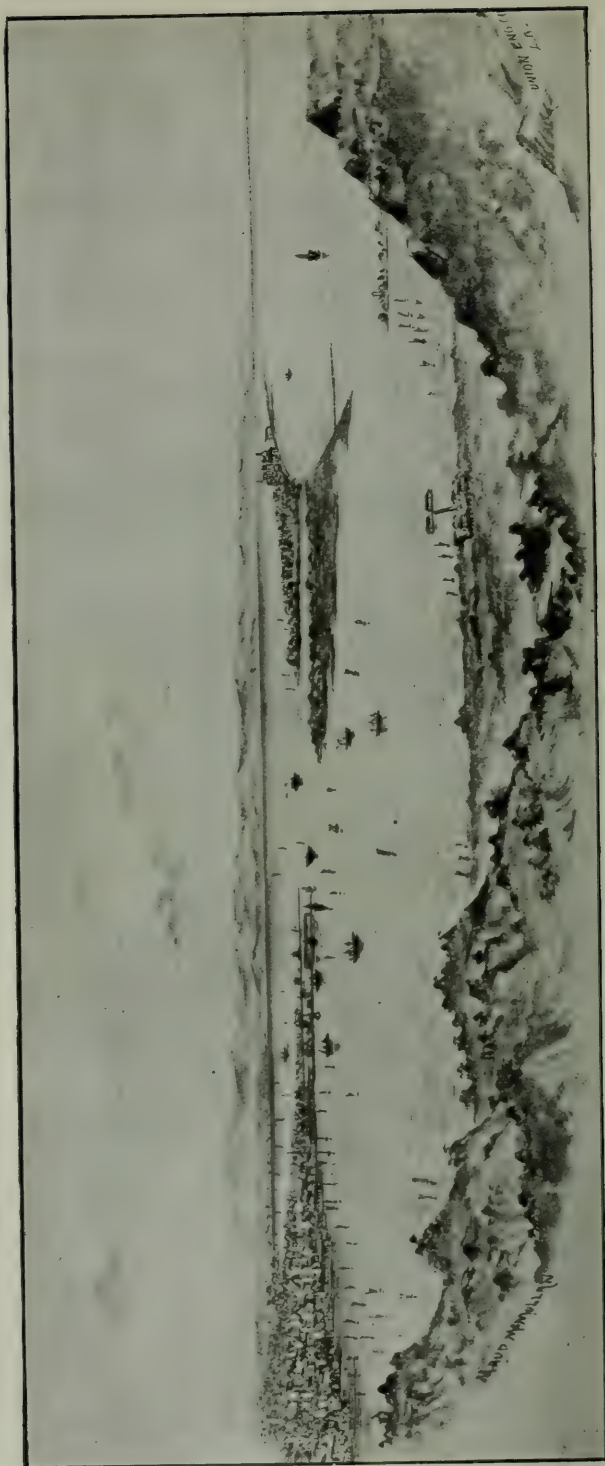
FINANCIAL STATEMENT.

Receipts None.
Disbursements None.

SHIPPING.

NUMBER OF VESSELS THAT ARRIVED IN THE PORT OF SAN DIEGO IN THE TWO YEARS
OCTOBER 1, 1902, TO OCTOBER 1, 1904.

Month.	Steam Vessels.				Sailing Vessels.			
	From Ports in the United States.	From Foreign Ports.	Total.	Tonnage.	From Ports in the United States.	From Foreign Ports.	Total.	Tonnage
1902—October	13	6	19	16,383	7	5	12	3,737
November	13	10	23	20,644	7	6	13	8,108
December	12	9	21	27,322	5	6	11	4,931
1903—January	11	7	18	17,438	3	5	8	1,144
February	11	5	16	13,883	5	1	6	978
March	15	10	25	24,020	2	4	6	636
April	14	11	25	23,530	5	3	8	1,754
May	15	10	25	20,675	3	5	8	3,143
June	13	10	23	21,934	6	3	9	2,260
July	12	7	19	18,329	6	6	12	7,834
August	16	6	22	17,207	8	4	12	2,111
September	11	8	19	17,934	15	4	19	8,153
October	19	9	28	21,855	7	1	8	1,980
November	12	6	18	14,439	4	4	8	3,985
December	13	8	21	18,470	5	3	8	1,704
1904—January	14	7	21	18,652	4	3	7	1,011
February	13	6	19	15,030	1	3	4	3,079
March	19	7	26	21,157	7	3	10	6,320
April	14	8	22	15,601	6	1	7	2,637
May	12	9	21	15,881	4	—	4	2,340
June	13	7	20	18,631	4	2	6	1,304
July	17	8	25	17,716	4	2	6	4,257
August	13	6	19	14,177	5	4	9	4,836
September	19	6	25	21,127	4	1	5	1,340



THE BAY OF SAN DIEGO.

THE BAY OF SAN DIEGO.

The Bay of San Diego lies in the extreme southern part of the great commonwealth of California. It is the southerly of the great deep-water harbors of the California coast. Completely landlocked, it is perfectly secure from the effects of any storms that may sweep the ocean. It is the first port in the United States to be reached by a vessel passing from the Atlantic to the Pacific through the Isthmian Canal, and it is the initial point in the most direct route from the California coast through Hawaii to the Orient.

Latitudinally below the region of the polar, westerly winds, which cause the fierce storms of the tempestuous northern seas, the path from San Diego to Hawaii, Australia, and the Orient lies across a stormless Pacific Ocean. Westward the star of empire is now rapidly taking its way, and the time for the greater development and fuller utilization of this splendid harbor is near.

HARBOR.

In the form of a crescent, about thirteen miles in length, varying from a half mile to two miles in width, the bay has an area of about twenty-two square miles. The depth over the bar is never less than twenty-eight feet and at high tide it is thirty-four feet.

“White water” is never seen on the bar; there is, in fact, very little perceptible swell. There are no hidden reefs, sunken rocks, or treacherous currents to guard against. The entrance is straight and easy of access. So smooth and placid are the waters of the harbor that ships lying alongside wharves rarely need fenders to prevent chafing. So quiet and calm is the atmosphere that only on one or two occasions in a year do winds reach so great a velocity as twenty-five or thirty miles an hour.

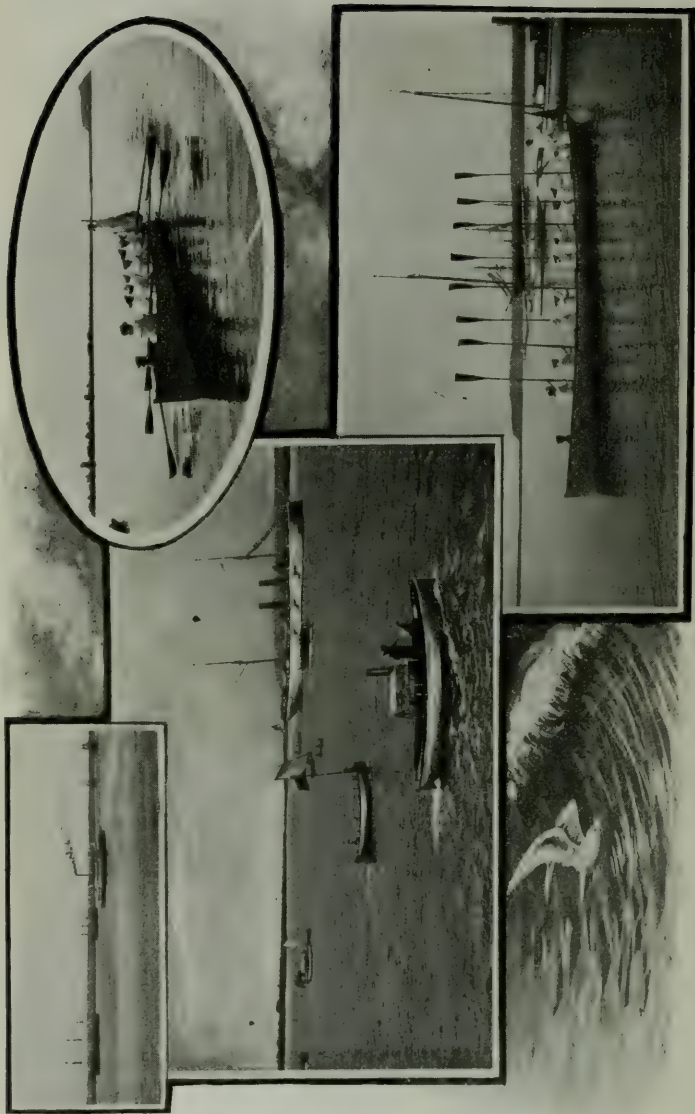
Loma Peninsula, its huge bulk looming against the sky, forms the northwestern shore of the bay, warding off the strong northwesterly winds, perfectly shielding the harbor from their force.

LIGHTHOUSE.

Low, overhanging fogs are very rare; indeed, less than half a score in a year. The cheering rays of “Loma Light,” at the entrance of the harbor, shining far out over the dark waters of the ocean, welcome the seafaring man to a secure and quiet retreat.

ANCHORAGE.

A holding ground of deep, heavy, tough mud, depth of water sufficient to float the largest vessels that traverse the seas, and room enough for the entire navy of the United States and all its merchant marine to swing in the stream, give excellent anchorage. No vessel has ever



PLEASURE CRAFT IN THE HARBOR.

dragged her anchor, no marine disaster has ever occurred on account of storm in San Diego Harbor.

DREDGING.

The Government has had the bar dredged to a depth of twenty-eight feet at lowest low water, and a jetty has been constructed which causes the outflowing tide to scour the bottom, which is thus kept clear and is gradually deepening. The middle ground between the entrance and the anchorage has also been dredged, permitting vessels to steam directly up the harbor instead of making the old circuitous detour.



COAL BUNKERS.

MARINE WAYS—COAL BUNKERS.

On the Coronado side of the bay there is a marine ways capable of accommodating vessels of large tonnage. On the San Diego side are the huge coal bunkers of the Spreckels Brothers Commercial Company. These bunkers are among the largest on the Pacific Coast. They are fully equipped for rapidly coaling any steamer lying alongside.

WHARFAGE.

The wharves extend into deep water and are easy of approach. Tugs are not needed to lay vessels alongside, and usually when a vessel is ready to leave the wharf, with the aid of a line it may readily be swung into the stream.

The wharfage is ample for present needs, and indeed, is sufficient for a much larger commerce than that of the present. The wharves in the bay are all the private property of individuals or corporations. The life of the franchises for all of them will expire by the year 1907. The policy of the Board is to restrict to that time all renewals of franchises, with the view of having all wharves conform in the future to a general plan in direction of extension and in plan of construction.

ISTHMIAN CANAL.

Owing to its juxtaposition to the Pacific outlet of the Isthmian Canal, the value of the harbor as a base for naval operations is already discerned by the Government. Impregnable forts have been built and other extensive works are in course of construction for defense and improvement.

San Diego Bay will be the only way port for Atlantic Coast shipping to and from Hawaii and the Orient, and vessels passing through the canal either way will put in to this port to recoal, take on supplies, or to overhaul and make repairs. This will necessitate the construction of dry docks and ship yards. Passengers desirous of reaching San Francisco or other northern points quickly can here transfer from ship to cars and rapidly complete their journey.

SEAWALL AND PIERHEAD LINES.

In March, 1890, pursuant to directions embodied in Section 2588 of the Political Code, the Board of State Harbor Commissioners for the Bay of San Diego had a portion of the harbor surveyed under the direction of a board of engineers consisting of Col. George H. Mendell, Lieut.-Col. W. H. H. Benyaurd, and the chief engineer for the Board, Mr. M. G. Wheeler. Seawall lines and pierhead lines were located in the bay in front of the business portion of San Diego and in front of Coronado. The seawall line is an average distance of two hundred feet from the shore, and the pierhead lines follow as nearly as possible the line of twenty-four feet depth of water at low tide.

Owing to lack of funds, nothing has been done toward building the seawall or erecting piers. The construction of the seawall would enable the Board to reclaim a large amount of valuable land along the water front, and the ownership by the State of the piers and wharves would be a source of revenue that would provide funds for the continuous further improvement of the harbor.

FORTIFICATIONS—QUARANTINE.

The strategic importance of the bay is recognized by the Government of the United States. Fort Rosecrans, at the mouth of the harbor, is located at the water's edge. Besides some smaller rapid-firing guns, there are four immense disappearing guns, which alone could defend the entrance against the enemy's fleet. Other batteries will soon be constructed.

The quarters of the officers and men are remarkably well appointed for convenience, comfort, and health, and are in substantial, finely constructed buildings, all new and handsome.

The Quarantine Station is fully equipped with the most modern fumigating and disinfecting apparatus, and has ample, well-arranged detention quarters.

A naval coaling station belonging to the Government is much desired. Appropriations for this purpose have been made, and it is confidently believed that a coaling station will soon be in course of construction.

As the value of the harbor becomes more fully appreciated, improvements rapidly follow each other, and the Bay of San Diego will soon be one of the most important naval stations on the Pacific Coast.

THE FUTURE.

Latitudinal and longitudinal position, climatic conditions, topographical features, proximity of the Isthmian Canal, transcontinental lines of railway, accessibility and security will eventually make San Diego Bay one of the greatest commercial ports in the world.

ORGANIZATION OF THE BOARD.

The members of the present Board of Commissioners, Capt. W. H. Pringle, Charles W. Oesting, and Eugene De Burn, were appointed by the Governor, and were confirmed by the Senate on March 14, 1903. They met in San Diego on the 24th of the same month and organized by electing Commissioner Oesting president, and Commissioner De Burn secretary. Commissioner W. H. Pringle was appointed Harbormaster; Hon. Victor E. Shaw was chosen Attorney for the Board, and G. A. d'Hemecourt was appointed Chief Engineer.

WORK OF THE BOARD.

When this Board assumed office, much of the water front and a large portion of the tide lands of the bay were in the possession of private individuals and corporations, many of whom have made large

investments in buildings and other improvements, and they claim ownership of the property, denying the right of the State to the possession or control of the tide lands they occupy.

The Board has held one regular meeting every month and twenty-three special meetings besides, and has been diligent in the performance of duty. Franchises have been granted giving authority for the construction and maintenance of small wharves and for making minor improvements, all under proper restrictions.

So much as possible, encroachment upon the tide lands by unauthorized persons has been prevented. With no revenue whatever, and with no authority to expend a dollar even if funds were in possession of the Board, it is impossible to carry forward improvements in the harbor. And it is very difficult to prevent the dumping of refuse into the bay, to enforce the observance of the rules and regulations adopted for the government of the harbor, to prevent seizure and conversion of the tide lands to private uses, and to conserve the rights and interests of the State in the bay and tide lands.

The State has a very large and valuable property in the Bay of San Diego and its tide lands. When the question of title to these lands is settled and the authority of the Harbor Commissioners is determined and acknowledged, a revenue may be collected that will provide for the continuous improvement of the harbor in accordance with the plans embodied in the Act creating the Harbor Commission.

FRANCHISES.

Applications for franchises were carefully considered; the time set for the hearing was advertised according to law, the place was visited and inspected by the Board unless they had previous knowledge of the location. A forfeiture clause was inserted in franchises for commercial wharves and railways, granted or renewed for a definite term. No definite term was fixed for small boat wharves and small marine ways, but they were to continue during the pleasure of the Board, so that they might be removed at any time that their location should be required for large commercial wharves.

May 18, 1903; to San Diego Yacht Club. Wharf for small pleasure boats; during the pleasure of the Board.

July 9, 1903; to Russ Lumber and Mill Company; wharf for unloading lumber; renewal for five years.

November 19, 1903; to Corinthian Yacht Club; wharf for small pleasure boats; for five years.

December 23, 1903; to the City of National City; wharf for the pleasure of the public; five years.

January 7, 1904; to Santana Romero; small boat ways; during the pleasure of the Board.

January 7, 1904; to A. C. Johnstone; small boat ways; during the pleasure of the Board.

January 20, 1904; to the San Diego Union Railway and Ship Terminal Company; wharf and piers for commercial purposes; for twenty-five years. This franchise was forfeited and annulled on June 7, 1904, because the company failed to comply with the conditions set forth in the franchise.

April 5, 1904; to M. F. Cabral; small boat ways and wharf for small fishing boats; during the pleasure of the Board.

April 6, 1904; to Capt. E. O. Lutz; wharf and float for pleasure boats and launches; during the pleasure of the Board.

June 8, 1904; to Manuel S. Goularte; small marine ways and dry dock, and wharf and pier for small boats; during the pleasure of the Board.

June 8, 1904; to Capt. S. Cotton; wharf for small craft; during the pleasure of the Board.

June 8, 1904; to Fishermen's Protective Union, Local No. 10637; wharf for fishing boats and a building; during the pleasure of the Board.

September 6, 1904; to the San Diego Electric Railway Company; foot wharf with pipe-line under it to pump salt water from the bay. Twenty years.

September 20, 1904; to E. S. Babcock; for right of way twenty feet wide, over tide lands, for double track railroad, from foot of Sixth street to foot of Seventh street in San Diego, California; twenty years.

On August 20, 1903, the San Diego Eastern Railway Company made application for a franchise for right of way, one hundred feet wide over the tide lands along the water front, for a railroad. On September 1, 1903, the matter was laid over indefinitely.

On October 6, 1903, Commissioners Oesting and De Burn were appointed a special committee to prevent further dumping of old cans and other refuse into the bay.

On December 1, 1903, Miss Anna Zeil made application for permission to erect a building for a retail store on the tide lands at the foot of Arctic street, San Diego. The application was denied.

On May 4, 1904, an application was received from Eli Newsom asking permission to erect a residence on piles in the bay, near National City. The application was denied.

On May 4, 1904, an application was received from Lohr Brothers asking permission to erect advertising signs on the bay near the Pacific Coast Steamship Company's wharf. The application was denied.

On June 7, 1904, the Pacific Coast Steamship Company made application for a renewal of franchise to continue the maintenance of their wharves for twenty-five years. On September 6, 1904, the matter was laid over, pending still further investigation.

On August 2, 1904, C. Telson made application for a franchise for a foot wharf, a boat shop, and a small marine ways on the tide lands. On September 15, 1904, Mr. Quince Crane, by his attorney, F. W. Stearnes, filed a protest against the granting of the franchise, claiming ownership of the tide lands to be covered by the franchise. The matter was laid over until the regular meeting, October 4th.

RECOMMENDATION.

The Board recommends that legislation be enacted giving the Board authority to expend a limited sum of money for necessary incidental expenses, and for necessary cost and expense of protecting the rights of the State in the bay and tide lands, the Board to account to the proper authority for such expenditure.

Respectfully submitted.

CHAS. W. OESTING,
CAPT. W. H. PRINGLE,
EUGENE DE BURN,

*Board of State Harbor Commissioners
for the Bay of San Diego.*

REPORT

OF THE

STATE BOARD OF EQUALIZATION

FOR

1903-1904.

STATE BOARD OF EQUALIZATION:

ALEX. BROWN - - *Chairman,*

W. H. ALFORD, R. H. BEAMER, F. MATTISON, E. P. COLGAN.

CHAS. M. COGLAN, - *Secretary.*



SACRAMENTO:

W. W. SHANNON, - - - SUPERINTENDENT STATE PRINTING.

1905.

REPORT OF STATE BOARD OF EQUALIZATION.

To His Excellency, GEORGE C. PARDEE, Governor:

SIR: In accordance with Section 3692 of the Political Code, the State Board of Equalization herewith submits the following report:

Schedules "A" show the amount of property upon which the State rate of taxation was based, and the rates for 1903-1904.

Schedules "B" show number of acres of land assessed as per Auditors' statements, and valuation of real estate and improvements.

Schedules "C" show value of property mortgaged, assessed value of mortgages, and percentage of mortgages to total value of real estate and improvements.

Schedules "D" show value of all property after equalization by the Board.

Schedules "E" show assessment and apportionment of railways.

Schedule "F" shows apportionment of railways to counties.

Schedule "G" shows assessment of personal property.

Schedules "H" give agricultural and horticultural statistics.

Schedule "I" shows assessment of telegraph and telephone lines, 1904.

Schedule "J" shows total assessed value of property, and rates of State taxation from 1850 to 1904, inclusive.

A. BROWN, Chairman.

R. H. BEAMER.

W. H. ALFORD.

FRANK MATTISON.

E. P. COLGAN.

C. M. COGLAN, Clerk.

VALUATIONS AND RATES OF TAXATION—1903.

SCHEDULE A.

Showing Amount of Property upon which the State Rate of Taxation was Based, and the Rate for 1903.

Value returned by Auditors	\$1,334,554,718
Increase by Board	178,423,555
Net amount of assessment	\$1,512,978,273
Railroad assessments by Board	84,187,758
Amount upon which tax is based	<u>\$1,597,166,031</u>

Amount to be Raised for Fifty-fifth Fiscal Year.

		Rate.
General Fund	\$5,200,000	34.3
School Fund	2,617,993	17.3
Interest and Sinking Fund	141,435	1.0
University Fund		2.0
High School Fund		1.5
Total	<u>\$7,959,428</u>	<u>56.1</u>

Showing Assessed Value returned by Auditors and Amount of Increase by the Board for 1903.

Counties.	Assessment.	Percent- age.	Increase.
Alameda	\$104,462,681	20	\$20,979,731
Butte	13,595,845	10	1,342,447
Contra Costa	18,129,450	10	1,774,846
Humboldt	22,696,629	10	2,214,863
Marin	11,931,385	15	1,781,760
Mendocino	11,127,172	15	1,650,854
Napa	11,885,860	10	1,165,433
Orange	11,059,705	15	1,647,145
Riverside	12,031,881	15	1,792,084
Sacramento	34,650,120	15	5,138,480
San Bernardino	14,953,830	15	2,221,528
San Francisco	427,641,648	30	118,213,676
San Mateo	15,127,600	10	1,482,782
Santa Barbara	15,507,105	10	1,540,574
Santa Clara	52,071,492	15	7,754,448
Santa Cruz	10,762,480	10	1,066,514
Solano	17,361,771	10	1,725,130
Sonoma	25,843,795	10	2,540,207
Ventura	9,410,592	10	928,753
Yolo	14,855,015	10	1,462,300
Total increase			<u>\$178,423,555</u>

SCHEDULE B.

Number of Acres of Land Assessed, as per Auditors' Statement, and Valuation of Real Estate and Improvements, for 1903.

Counties.	Acres.	Value of Real Estate other than City and Town Lots.	Value of City and Town Lots.	Value of All Real Estate.	Value of Improvements on Real Estate Other than City and Town Lots.	Value of Improvements on City and Town Lots.	Value of All Improvements.
Alameda	454,184	\$16,053,425	\$39,266,925	\$55,320,350	\$5,379,485	\$26,902,170	\$32,281,655
Alpine	53,325	192,739	1,220	193,959	156,378	2,840	159,218
Amador	265,232	2,496,020	272,835	2,768,855	636,470	741,150	1,377,620
Butte	877,472	7,852,420	848,340	8,700,760	1,171,100	1,357,165	2,528,265
Calaveras	460,017	3,185,000	186,105	3,371,105	1,063,965	630,900	1,694,865
Colusa	599,515	8,613,486	282,036	8,895,522	506,622	584,649	1,091,271
Contra Costa	465,092	8,701,715	1,193,480	9,895,195	2,447,805	1,119,625	3,567,430
Del Norte	172,841	2,219,183	60,970	2,280,153	150,665	141,735	292,400
El Dorado	644,447	2,176,865	160,870	2,337,735	695,015	410,305	1,105,320
Fresno	1,549,781	16,180,854	3,659,220	19,840,074	3,056,462	3,550,204	6,606,666
Glenn	618,817	7,677,477	159,320	7,836,797	564,186	200,900	765,086
Humboldt	1,475,880	13,407,214	3,205,720	16,612,934	1,019,350	1,902,940	2,922,290
Inyo	201,844	961,348	98,766	1,060,114	400,358	163,182	563,540
Kern	2,809,331	12,126,627	1,343,257	13,469,884	1,123,414	1,671,365	2,793,779
Kings	653,520	4,374,110	445,055	4,819,165	569,405	560,787	1,130,192
Lake	342,838	1,827,358	157,692	1,984,950	504,455	211,060	715,515
Lassen	556,453	2,304,480	71,185	2,375,665	388,868	159,295	548,163
Los Angeles	1,121,796	26,781,649	69,686,640	96,468,289	5,592,165	34,593,435	40,185,600
Madera	719,894	3,555,075	240,000	3,795,075	427,540	198,255	625,795
Marin	319,359	5,269,715	2,301,190	7,570,905	1,025,325	2,085,220	3,110,545
Mariposa	304,020	1,355,184	38,623	1,393,807	333,856	108,098	441,954
Mendocino	1,468,437	6,567,716	547,853	7,115,569	989,283	839,552	1,828,835
Merced	1,190,244	9,238,316	519,810	9,758,126	670,418	610,773	1,281,191
Modoc	426,920	1,774,904	43,047	1,817,951	421,185	197,864	619,049
Mono	156,202	457,674	19,860	477,534	211,554	95,470	307,024
Monterey	1,531,320	10,581,245	1,464,045	12,045,290	1,579,345	1,191,970	2,771,315

Napa	404,704	4,784,105	1,012,330	5,796,435	2,151,460	1,630,985	3,790,445
Nevada	471,495	2,323,610	401,870	2,725,480	1,409,595	1,261,855	2,671,450
Orange	444,950	5,507,955	1,314,580	6,822,535	1,299,740	1,314,805	2,614,545
Placer	637,690	3,862,010	387,255	4,249,265	1,230,015	855,265	2,085,280
Plumas	483,738	1,882,750	31,546	1,914,296	332,776	138,131	470,907
Riverside	848,620	5,357,135	1,202,373	6,559,508	2,509,530	1,464,080	4,173,610
Sacramento	607,550	11,023,760	8,407,450	19,431,210	1,851,310	7,750,090	9,601,400
San Benito	549,038	3,868,405	286,380	4,154,785	605,725	378,530	984,255
San Bernardino	464,733	6,858,630	1,820,855	8,679,485	2,494,585	2,098,615	4,593,200
San Diego	1,171,194	4,382,695	6,886,838	11,269,533	995,200	3,216,414	4,211,614
San Francisco	27,000	2,641,570	198,866,420	201,507,990	446,900	98,137,260	98,584,160
San Joaquin	875,927	14,572,995	5,991,531	20,564,526	1,761,356	4,944,210	6,705,566
San Luis Obispo	1,271,265	7,451,337	890,004	8,341,341	772,466	1,002,426	1,774,892
San Mateo	287,702	7,360,655	1,702,075	9,062,730	2,630,220	965,135	3,596,355
Santa Barbara	1,101,430	7,250,885	3,044,475	10,295,360	1,022,120	2,121,420	3,123,540
Santa Clara	640,942	21,127,995	11,784,305	32,912,300	7,168,480	6,961,815	14,130,265
Santa Cruz	259,783	4,046,600	2,299,795	6,346,395	1,438,915	1,583,995	3,022,910
Shasta	1,278,843	4,492,303	569,213	5,061,516	1,328,653	925,441	2,254,094
Sierra	335,148	1,021,825	51,170	1,072,995	212,370	189,810	402,180
Siskiyou	1,655,578	5,267,722	255,035	5,522,757	1,076,104	631,665	1,707,769
Solano	518,187	9,852,591	1,137,961	10,990,552	1,866,980	2,405,568	4,272,548
Sonoma	868,727	12,233,020	3,122,385	15,355,405	3,464,965	3,006,810	6,471,775
Stanislaus	928,821	7,414,750	466,485	7,881,235	725,710	693,880	1,419,590
Sutter	374,513	4,196,257	73,700	4,269,957	650,706	154,400	805,106
Tehama	1,158,223	5,986,095	536,130	6,522,225	868,740	934,250	1,802,990
Trinity	509,924	839,675	30,166	869,841	370,291	94,956	464,887
Tulare	1,401,160	9,255,226	783,557	10,038,783	1,388,934	1,108,814	2,497,748
Tuolumne	402,995	3,686,700	240,660	3,927,360	1,509,010	484,115	1,993,125
Ventura	572,587	5,240,496	671,237	5,911,733	915,275	739,315	1,664,590
Yolo	598,370	10,083,691	783,255	10,886,956	1,044,710	1,261,719	2,306,429
Yuba	294,878	2,368,780	414,875	2,783,655	428,500	889,665	1,318,165
Totals	40,881,396	\$372,143,922	\$381,739,885	\$753,883,807	\$77,055,985	\$228,389,496	\$305,445,481

SCHEDULE C.

Value of Property Mortgaged, Assessed Value of Mortgages, etc., for 1903.

Counties.	Assessed Value of Property Mortgaged.	Value of Mortgages.	Per Cent of Mortgages to Total Value Real Estate and Im- provements.
Alameda	\$38,750,000	\$18,186,050	20.85
Alpine	24,073	18,050	5.11
Amador	404,947	404,947	9.79
Butte	2,297,532	1,792,868	15.96
Calaveras	1,225,000	687,655	13.57
Colusa	3,321,422	1,680,187	16.04
Contra Costa	4,620,150	3,181,625	23.63
Del Norte	494,497	401,752	15.60
El Dorado	420,800	307,045	8.91
Fresno	7,168,385	5,086,449	19.23
Glenn	2,650,000	1,516,745	17.63
Humboldt	4,005,745	2,279,543	11.68
Inyo	361,238	249,088	15.34
Kern	1,841,746	1,559,966	9.59
Kings	1,996,570	1,045,324	17.57
Lake	700,000	422,656	15.66
Lassen	768,530	424,763	14.52
Los Angeles	8,311,120	5,561,900	4.09
Madera	755,330	454,985	10.78
Marin	3,027,610	2,311,230	21.63
Mariposa	231,768	115,543	6.30
Mendocino	1,319,192	1,323,097	14.79
Merced	2,743,859	1,804,578	16.40
Modoc	478,840	333,235	13.67
Mono	98,084	60,063	7.65
Monterey	4,212,115	1,932,175	13.04
Napa	1,889,520	1,460,670	15.23
Nevada	685,000	491,185	9.10
Orange	281,610	211,215	2.23
Placer	1,640,210	968,100	15.28
Plumas	570,267	167,598	7.02
Riverside	1,150,480	528,649	4.92
Sacramento	6,000,000	1,148,920	3.95
San Benito	1,878,335	1,315,615	25.60
San Bernardino	1,823,675	869,765	6.55
San Diego	2,800,000	1,880,980	12.15
San Francisco	72,640,200	49,316,936	16.43
San Joaquin	7,100,000	4,167,996	15.28
San Luis Obispo	2,053,196	1,579,382	15.61
San Mateo	2,670,340	1,402,940	11.08
Santa Barbara	3,067,140	2,326,670	17.33
Santa Clara	7,725,450	7,725,450	16.42
Santa Cruz	1,975,975	1,345,605	14.36
Shasta	1,168,750	637,340	8.71
Sierra	141,380	114,225	7.74
Siskiyou	1,160,320	580,200	8.02
Solano	2,842,217	2,842,217	18.62
Sonoma	4,971,380	3,638,105	16.66
Stanislaus	2,858,025	2,007,735	21.58
Sutter	1,371,270	894,007	17.61
Tehama	3,642,750	1,389,105	16.68
Trinity	150,557	106,414	8.00
Tulare	2,240,522	2,124,008	16.94
Tuolumne	1,253,490	940,115	15.87
Ventura	1,728,534	1,623,927	21.43
Yolo	3,184,449	1,967,846	14.96
Yuba	1,054,600	707,945	17.23
Totals	\$235,948,195	\$149,622,384	

SCHEDULE D.
Showing Value of all Property as Returned by Auditors, and after Equalization by the Board, for 1903.

Counties.	Value of Real Estate and Improve- ments,	Personal Property other than Money and Solvent Credits,	Money and Solvent Credits.	Value Preceding Columns.	Value after Equaliza- tion.	Railroad Assessment.	Total Value of All Property.
Alameda	\$87,189,805	\$17,708,851	\$564,025	\$105,462,681	\$126,442,412	\$2,203,785	\$128,646,197
Alpine	353,177	65,285	3,601	422,063	422,063	-----	422,063
Amador	4,146,475	626,503	23,553	4,796,533	4,796,533	120,000	4,916,533
Butte	11,229,025	2,195,454	171,366	13,595,845	14,938,292	1,119,474	16,057,766
Calaveras	5,065,970	873,075	33,080	5,972,125	5,972,125	205,150	6,177,275
Colusa	9,986,793	1,475,588	211,738	11,674,119	11,674,119	513,977	12,188,096
Contra Costa	13,462,625	4,285,840	380,985	18,129,450	19,904,296	1,730,096	21,634,392
Del Norte	2,572,553	301,365	8,536	2,882,454	2,882,454	-----	2,882,454
El Dorado	3,443,055	748,995	18,540	4,210,590	4,210,590	458,250	4,668,840
Fresno	26,446,740	4,168,872	129,108	30,744,720	30,744,720	3,386,053	34,130,773
Glenn	8,601,883	1,177,945	174,461	9,954,289	9,954,289	690,040	10,644,329
Humboldt	19,535,224	2,613,405	548,000	22,696,629	24,911,492	-----	24,911,492
Inyo	1,623,654	551,402	37,094	2,212,150	2,212,150	103,489	2,315,639
Kern	16,264,053	5,023,583	74,427	21,362,673	21,362,673	2,677,783	24,040,456
Kings	5,949,357	1,256,402	86,699	7,292,458	7,292,458	590,551	7,883,009
Lake	2,698,965	520,810	33,507	3,253,282	3,253,282	-----	3,253,282
Lassen	2,923,828	1,298,246	145,061	4,367,135	4,367,135	223,613	4,590,748
Los Angeles	135,920,889	27,863,030	843,503	164,627,422	164,627,422	3,933,614	168,561,036
Madera	4,220,870	1,155,540	33,845	5,410,255	5,410,255	1,133,240	6,543,495
Marin	10,681,450	1,196,955	52,980	11,931,385	13,713,145	771,837	14,484,982
Mariposa	1,835,761	432,858	975	2,269,594	2,269,594	-----	2,269,594
Mendocino	8,944,404	2,061,290	121,478	11,127,172	12,778,026	329,547	13,107,573
Merced	11,001,427	1,954,783	35,283	12,991,493	12,991,493	1,887,837	14,879,330
Modoc	2,437,000	1,554,594	85,086	4,076,680	4,076,680	-----	4,076,680
Mono	784,558	309,985	9,835	1,104,378	1,104,378	46,511	1,150,889
Monterey	14,816,605	1,896,035	74,435	16,787,075	16,787,075	2,163,079	18,950,154
Napa	9,586,880	2,067,450	231,530	11,885,860	13,051,293	711,450	13,762,743
Nevada	5,396,930	1,028,900	52,280	6,478,110	6,478,110	725,239	7,203,349

SCHEDULE D—Continued.

Counties.	Value of Real Estate and Improvements.	Personal Property other than Money and Solvent Credits.	Money and Solvent Credits.	Value Preceding Columns.	Value after Equalization.	Railroad Assessment.	Total Value of All Property.
Orange	\$9,437,080	\$1,543,895	\$78,730	\$11,059,705	\$12,706,850	\$1,106,030	\$13,812,880
Placer	6,334,545	879,090	116,410	7,330,045	7,330,045	2,347,679	9,677,724
Plumas	2,385,203	323,212	1,900	2,710,315	2,710,315	81,306	2,791,621
Riverside	10,733,118	1,214,113	84,650	12,031,881	13,823,965	2,548,674	16,372,639
Sacramento	29,032,610	5,223,920	393,590	34,650,120	39,788,600	1,569,534	41,358,134
San Benito	5,139,040	1,030,370	64,555	6,233,965	6,233,965	265,103	6,499,068
San Bernardino	13,272,686	1,557,510	143,635	14,953,830	17,175,358	4,234,324	21,399,682
San Diego	15,481,147	2,675,771	108,185	18,265,103	18,265,103	2,549,504	20,814,607
San Francisco	300,092,150	93,953,439	33,596,059	427,641,648	545,855,324	18,203,855	564,059,179
San Joaquin	27,270,092	3,391,764	771,132	32,032,988	32,032,988	2,706,817	34,739,805
San Luis Obispo	10,116,233	2,139,804	193,136	12,449,173	12,449,173	1,230,168	13,679,341
San Mateo	12,658,085	2,169,735	299,780	15,127,600	16,610,382	2,345,242	18,955,624
Santa Barbara	13,418,900	1,986,845	101,360	15,507,105	17,047,679	1,779,484	18,827,163
Santa Clara	47,042,565	4,653,762	375,165	52,071,492	59,826,940	1,574,692	61,400,632
Santa Cruz	9,369,305	1,295,835	97,340	10,762,480	11,828,994	703,136	12,532,130
Shasta	7,315,610	1,830,567	80,943	9,227,120	9,227,120	1,661,616	10,888,736
Sierra	1,475,175	205,325	3,400	1,683,900	1,683,900	159,660	1,843,560
Siskiyou	7,230,526	1,447,433	198,806	8,876,765	8,876,765	1,683,885	10,560,650
Solano	15,263,100	1,987,202	110,469	17,361,771	19,086,901	1,108,583	20,195,484
Sonoma	21,827,180	3,574,890	441,725	25,843,795	28,384,002	1,996,416	30,380,418
Stanislaus	9,300,825	1,750,985	185,875	11,237,685	11,237,685	1,596,523	12,834,208
Sutter	5,075,063	892,181	52,945	6,020,189	6,020,189	601,889	6,622,078
Tehama	8,325,215	2,139,595	127,000	10,591,810	10,591,810	1,082,752	11,674,562
Trinity	1,334,738	297,289	18,345	1,650,362	1,650,362	---	1,650,362
Tulare	12,536,531	2,311,285	154,673	15,002,489	15,002,489	2,444,553	17,447,042
Tuolumne	5,920,485	902,950	32,590	6,856,025	6,856,025	233,700	7,089,725
Ventura	7,576,323	1,711,207	123,062	9,410,592	10,339,345	826,061	11,165,406
Yolo	13,143,354	1,479,622	232,009	14,855,015	16,317,315	1,323,637	17,640,952
Yuba	4,101,820	1,158,640	130,570	5,391,030	5,391,030	508,320	5,899,350
Totals	\$1,059,329,289	\$232,722,279	\$42,603,150	\$1,334,554,718	\$1,512,978,273	\$84,187,758	\$1,597,166,031

SCHEDULE E.

Showing Assessment and Apportionment of Railways for 1903.

Name of each Railway Assessed, and Name of the County to which Assessment is Appor- tioned.	Number of Miles of Railway Operated in the State.	Number of Miles of each Rail- way in each County.	Value per Mile of each Railway.	Total Assess- ment of each Railway.	Amount of Assessment of each Rail- way Appor- tioned to each County.
Central Pacific Railway	746.76		\$20,086 77	\$15,000,000	
Alameda		83.14			\$1,670,014
Butte		45.00			903,905
Fresno		32.00			642,777
Madera		29.06			583,721
Merced		36.75			738,189
Nevada		30.25			607,625
Placer		112.75			2,264,783
Sacramento		41.00			823,558
San Francisco		2.46			49,414
San Joaquin		56.75			1,139,924
Santa Clara		8.50			170,738
Shasta		82.08			1,648,722
Sierra		2.15			43,187
Siskiyou		83.18			1,670,818
Stanislaus		22.63			454,564
Sutter		10.00			200,868
Tehama		40.54			814,318
Tulare		12.65			254,098
Yuba		15.87			318,777
South Pacific Coast Railway	96.16		10,500 00	1,009,680	
Alameda		31.46			330,330
Santa Clara		37.00			388,500
Santa Cruz		27.70			290,850
Southern Pacific Railroad	2,150.58		15,000 00	32,258,700	
Alameda		11.90			178,500
Amador		8.00			120,000
Butte		13.90			208,500
Calaveras		10.46			156,900
Colusa		33.91			508,650
Contra Costa		80.05			1,200,750
El Dorado		30.55			458,250
Fresno		148.93			2,233,950
Glenn		45.70			685,500
Kern		131.23			1,968,450
Kings		23.32			349,800
Los Angeles		201.48			3,022,200
Madera		21.00			315,000
Merced		52.50			787,500
Monterey		130.03			1,950,450
Napa		47.43			711,450
Orange		25.15			377,250
Riverside		92.60			1,389,000
Sacramento		49.25			738,750
San Benito		17.65			264,750
San Bernardino		40.53			607,950
San Diego		87.79			1,316,850
San Francisco		7.36			110,400
San Joaquin		71.59			1,073,850
San Luis Obispo		72.60			1,089,000
San Mateo		25.10			376,500
Santa Barbara		109.47			1,642,050
Santa Clara		67.10			1,006,500
Santa Cruz		27.15			407,250
Solano		73.45			1,101,750
Sonoma		30.52			457,800
Stanislaus		56.86			852,900
Sutter		26.63			399,450
Tehama		17.29			259,350
Tulare		107.33			1,609,950
Ventura		54.50			817,500
Yolo		87.80			1,317,000
Yuba		12.47			187,050

SCHEDULE E—Continued.

Showing Assessment and Apportionment of Railways for 1903.

Name of each Railway Assessed, and Name of the County to which Assessment is Apportioned.	Number of Miles of Railway Operated in the State.	Number of Miles of each Railway in each County.	Value per Mile of each Railway	Total Assessment of each Railway.	Amount of Assessment of each Railway Apportioned to each County.
Southern California Motor Road	12.00		\$5,000 00	\$60,000	
Riverside		6.00			\$30,000
San Bernardino		6.00			30,000
Carson and Colorado Railway	107.62				
Inyo		74.25	1,393 79	150,000	103,489
Mono		33.37			46,511
San Francisco and North Pacific Railway (California Northwestern Ry. Co. Lessee)	165.52		12,083 13	2,000,000	
Marin		29.50			356,452
Mendocino		26.00			314,162
Sonoma		110.02			1,329,386
Santa Fé Pacific Railroad	242.542		9,000 00	2,182,878	
Kern		35.914			323,226
San Bernardino		206.628			1,859,652
San Francisco and San Joaquin Valley Railway	374.71		8,539 93	3,200,000	
Contra Costa		55.41			473,198
Fresno		56.99			486,691
Kern		41.46			354,065
Kings		27.68			236,385
Madera		26.44			225,796
Merced		40.36			344,672
San Joaquin		39.50			337,327
Stanislaus		21.14			180,534
Tulare		65.73			561,332
Southern California Railway	478.066		11,504 68	5,500,000	
Los Angeles		76.708			882,502
Orange		62.691			721,240
Riverside		96.928			1,115,127
San Bernardino		136.691			1,572,587
San Diego		105.048			1,208,544
North Pacific Coast Railroad	84.50		7,100 58	600,000	
Marin		58.50			415,385
Sonoma		26.00			184,615
Pacific Coast Railway	76.10		3,285 15	250,000	
San Luis Obispo		39.50			129,763
Santa Barbara		36.60			120,237
Pajaro Valley Con. R. R.	32.90		6,079 02	200,000	
Monterey		32.11			195,197
Santa Cruz		.79			4,803
Nevada County Narrow Gauge Railroad	22.50		5,000 00	112,500	
Nevada		18.78			93,900
Placer		3.72			18,600
Nevada-California-Oregon Ry.	114.13		1,971 43	225,000	
Lassen		110.87			218,573
Sierra		3.26			6,427
Sierra Valleys Railway	30.50		1,200 00	36,600	
Lassen		4.20			5,040
Plumas		26.30			31,560
Alameda and San Joaquin Railroad	35.88		4,180 59	150,000	
Alameda		2 79			11,664
San Joaquin		33.09			138,336
Sierra Railway of California	75.94		5,000 00	379,700	
Calaveras		9.65			48,250
Stanislaus		19.55			97,750
Tuolumne		46.74			233,700

SCHEDULE E—Continued.

Showing Assessment and Apportionment of Railways for 1903.

Name of each Railway Assessed, and Name of the County to which Assessment is Appor- tioned.	Number of Miles of Railway Operated in the State.	Number of Miles of each Rail- way in each County.	Value per Mile of each Railway.	Total Assess- ment of each Railway.	Amount of Assessment of each Rail- way Appor- tioned to each County
Randsburg Railway-----	29.05	-----	\$3,442 34	\$100,000	-----
Kern-----	-----	.40	-----	-----	\$1,377
San Bernardino-----	-----	28.65	-----	-----	98,623
Gualala Mill Railroad-----	13.00	-----	3,076 92	40,000	-----
Mendocino-----	-----	5.00	-----	-----	15,385
Sonoma-----	-----	8.00	-----	-----	24,615
California and Nevada R. R.-----	23.00	-----	2,173 91	50,000	-----
Alameda-----	-----	5.50	-----	-----	11,957
Contra Costa-----	-----	17.50	-----	-----	38,043
Lake Tahoe Railway-----	15.30	-----	3,267 98	50,000	-----
Nevada-----	-----	1.10	-----	-----	3,595
Placer-----	-----	14.20	-----	-----	46,405
Boca and Loyaltan Railroad-----	39 40	-----	4,441 62	175,000	-----
Nevada-----	-----	3.50	-----	-----	15,546
Plumas-----	-----	11.20	-----	-----	49,746
Sierra-----	-----	24.70	-----	-----	109,708
*United Railroads of San Francisco-----	144.904	-----	138,075 55	20,007,700	-----
San Francisco-----	-----	130.674	-----	-----	18,042,885
San Mateo-----	-----	14.230	-----	-----	1,964,815
Pullman Company (rolling stock operated in Cal.)-----	2,864 61	-----	157 09	450,000	-----
Alameda-----	-----	8.40	-----	-----	1,320
Butte-----	-----	45.00	-----	-----	7,069
Colusa-----	-----	33.91	-----	-----	5,327
Contra Costa-----	-----	115.25	-----	-----	18,105
Fresno-----	-----	144.09	-----	-----	22,635
Glenn-----	-----	28.90	-----	-----	4,540
Kern-----	-----	195.21	-----	-----	30,665
Kings-----	-----	27.79	-----	-----	4,366
Los Angeles-----	-----	184.05	-----	-----	28,912
Madera-----	-----	55.53	-----	-----	8,723
Merced-----	-----	111.25	-----	-----	17,476
Monterey-----	-----	110.30	-----	-----	17,327
Nevada-----	-----	30.25	-----	-----	4,752
Orange-----	-----	48.00	-----	-----	7,540
Placer-----	-----	112.75	-----	-----	17,712
Riverside-----	-----	92.60	-----	-----	14,547
Sacramento-----	-----	46.00	-----	-----	7,226
San Benito-----	-----	2.25	-----	-----	353
San Bernardino-----	-----	353.38	-----	-----	55,512
San Diego-----	-----	153.48	-----	-----	24,110
San Francisco-----	-----	7.36	-----	-----	1,156
San Joaquin-----	-----	110.64	-----	-----	17,380
San Luis Obispo-----	-----	72.60	-----	-----	11,405
San Mateo-----	-----	25.00	-----	-----	3,927
Santa Barbara-----	-----	109.47	-----	-----	17,197
Santa Clara-----	-----	57.00	-----	-----	8,954
Santa Cruz-----	-----	2.15	-----	-----	338
Shasta-----	-----	82.08	-----	-----	12,894
Sierra-----	-----	2.15	-----	-----	338
Siskiyou-----	-----	83.18	-----	-----	13,067
Solano-----	-----	43.50	-----	-----	6,833
Stanislaus-----	-----	68.59	-----	-----	10,775
Sutter-----	-----	10.00	-----	-----	1,571
Tehama-----	-----	57.83	-----	-----	9,084
Tulare-----	-----	122.05	-----	-----	19,173
Ventura-----	-----	54.50	-----	-----	8,561
Yolo-----	-----	42.25	-----	-----	6,637
Yuba-----	-----	15.87	-----	-----	2,493

* The Supreme Court decided that this system did not come under jurisdiction of the Board and should be assessed by local assessors.

SCHEDULE H.

Number of Fruit Trees Growing in Spring of 1903.

Counties.	Apple.		Apricot.		Cherry.		Fig.	
	Bearing.	Non-Bearing	Bearing.	Non-Bearing	Bearing	Non-Bearing	Bearing	Non-Bearing
Alameda	55,000	800	100,000	8,000	82,000	19,000	200	
Alpine	1,500	300			50			
Amador	4,672	970	1,452	38	530	165	450	35
Butte	7,960		12,525		9,200		10,120	
Calaveras	6,000	4,000	2,000	1,000	500	200	400	200
Colusa	3,886	1,450	11,978	4,800	376	395	2,775	2,000
Contra Costa	10,220	1,050	48,100	4,405	9,500	950	2,750	625
Del Norte*								
El Dorado	29,160	5,000	1,800	500	3,800	450	1,450	350
Fresno	17,238	1,350	60,300	9,500	1,175	345	34,645	17,745
Glenn	9,000		13,000		9,000		2,000	
Humboldt*								
Inyo	16,984		394		197		60	
Kern	1,200	1,000	20,000		1,000		1,000	
Kings	2,000		88,000	1,600				
Lake	11,725	1,400	500	940	505	40	640	
Lassen	46,820		260		1,025			
Los Angeles	125,880	23,715	124,330	5,390	140	1,250	480	445
Madera	3,470	200	5,810	20	33		635	
Marin	19,875	930	6,550	840	415	75	200	45
Mariposa	3,800		700		800		1,500	
Mendocino*								
Merced	4,050	700	15,000	4,005	300	50	11,000	2,000
Modoc	14,785	925	680	55	850	90		
Mono	300	200						
Monterey	176,280	18,200	19,530	2,380	2,300	800		
Napa	48,850	15,300	13,000	2,600	22,350	9,700	1,800	200
Nevada	37,200	500	4,220		2,160	40	760	
Orange	9,260	4,200	102,145	51,163			2,400	
Placer	19,400	6,770	13,300	7,480	15,900	9,040	5,100	3,840
Plumas	4,215	1,820						
Riverside	2,745	19,830	36,554	2,898	950	8	1,722	17
Sacramento	5,700	1,250	22,500	34,000	5,000	8,700	1,250	2,500
San Benito	11,000	200	17,000	1,500	2,200	400	200	
San Bernardino	10,500	2,500	45,000	2,500	9,000	3,000	1,500	1,000
San Diego	46,500	6,000	40,000	9,500	35,000	1,000	10,500	3,500
San Francisco*								
San Joaquin	10,140	1,714	92,549	3,720	21,200	4,708	4,305	970
San Luis Obispo	69,500	11,750	59,600	6,000	7,800	2,650	2,380	1,110
San Mateo	25,000	3,700	10,900	750	1,350		100	
Santa Barbara	14,280	7,160	8,490	2,130				
Santa Clara	16,900	3,700	539,050	10,940	128,110	21,750	1,580	600
Santa Cruz	285,840	289,150	35,465	29,720	18,643	4,387	312	118
Shasta	15,000		500		500		1,000	
Sierra	7,100				200			
Siskiyou*								
Solano	2,250		32,050		38,540		5,630	
Sonoma	198,750	81,670	17,850	3,145	39,870	21,820	3,490	1,810
Stanislaus	4,300	400	12,800	560	80	40	400	200
Sutter	3,800	50	17,265		10,670	100	4,615	1,130
Tehama	17,400	1,630	63,520	4,935	3,255	1,640	10,050	1,250
Trinity	4,700	2,700	40		400	150		
Tulare	2,107	1,008	43,714	210	123	10	2,800	10
Tuolumne	3,800	5,100	2,200	580	3,000	375	965	260
Ventura	8,657	1,050	223,090	28,230	1,252	150		
Yolo	400		200,000		7,000		4,000	
Yuba	7,000	700	17,400	4,600	9,400	2,700	5,000	1,780
Totals	1,464,099	531,542	2,203,104	250,634	507,449	116,678	142,179	43,740

* No report.

SCHEDULE H—Continued.

Number of Fruit Trees Growing in Spring of 1903.

Counties.	Olive.		Peach.		Pear.	
	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.
Alameda	4,300	1,000	86,000	1,100	66,000	4,000
Alpine						
Amador	67	40	14,185	300	6,230	60
Butte	90,000		127,500		18,125	
Calaveras	6,000	1,000	4,000	1,000	500	100
Colusa	2,075	1,375	10,045	2,125	23,095	5,850
Contra Costa	19,250	5,400	28,750	3,750	65,110	16,120
Del Norte*						
El Dorado	1,800	500	114,270	18,200	67,000	35,000
Fresno	27,000	4,100	415,400	169,900	61,010	18,300
Glenn	15,000		30,000		4,000	
Humboldt*						
Inyo			5,245		1,325	
Kern	4,700		35,000		5,000	
Kings			164,300	20,900		
Lake	1,925		6,280		16,920	
Lassen			765		1,710	
Los Angeles	329,525	65,005	125,800	10,810	11,320	7,060
Madera	5,540		21,210	775	2,040	
Marin			4,450	380		
Mariposa	1,000		7,000		4,000	
Mendocino*						
Merced	28,010	1,400	95,600	24,500	8,500	1,500
Modoc			570	60	715	35
Mono			100	50		
Monterey	2,130		8,200	200	4,100	610
Napa	51,000	1,500	96,850	14,870	58,230	2,300
Nevada	400	100	8,900	400	27,000	2,000
Orange	18,560		18,610	24,608	3,350	1,540
Placer	33,410	20,900	793,200	601,200	108,300	42,900
Plumas			500	400	800	600
Riverside	27,894	20,078	34,039	3,670	8,810	2,815
Sacramento	12,000	6,000	124,000	40,000	68,500	60,000
San Benito	300		15,200	1,600	12,000	4,500
San Bernardino	19,500	15,000	65,000	4,000	2,500	1,000
San Diego	45,000	40,000	45,000	40,000	18,500	3,500
San Francisco*						
San Joaquin	18,742	4,282	137,980	18,615	22,742	1,675
San Luis Obispo	3,010	720	64,200	18,250	36,400	8,850
San Mateo	7,500	500	1,200		4,000	
Santa Barbara	18,240	12,970	4,920	2,140	1,260	465
Santa Clara	9,005	4,850	500,400	38,200	122,350	15,900
Santa Cruz	1,867	2,436	22,318	2,976	22,493	2,870
Shasta	12,000		60,000		10,000	
Sierra			400			
Siskiyou*						
Solano	3,140		320,340		217,360	
Sonoma	50,670	52,970	228,700	11,870	71,510	28,280
Stanislaus	900	160	20,000	8,000	4,600	160
Sutter	2,445		145,000	18,000		
Tehama	19,310	122,840	590,850	116,050	44,980	14,320
Trinity			900	500	500	200
Tulare	600	10	217,865	18,175	6,430	
Tuolumne	25	25	9,200	2,995	2,400	400
Ventura	43,195		6,260	200	620	50
Yolo	18,000		150,000		52,000	
Yuba	7,600	1,675	71,000	31,410	17,560	2,900
Totals	962,635	386,836	5,057,502	1,272,179	1,311,835	285,860

* No report.

SCHEDULE H—Continued.

Number of Fruit Trees Growing in Spring of 1903.

Counties.	Prune (French).		Prune (other kinds).		Lemon.	
	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.
Alameda	145,000	22,000	2,100	400	1,200	-----
Alpine	120	50	-----	-----	-----	-----
Amador	1,170	1,520	220	50	12	6
Butte	80,100	-----	7,025	-----	520	-----
Calaveras	200	200	800	100	50	50
Colusa	62,660	4,280	-----	-----	215	100
Contra Costa	32,160	6,420	8,410	1,310	325	80
Del Norte*	-----	-----	-----	-----	-----	-----
El Dorado	14,000	100	90,000	2,500	150	-----
Fresno	59,150	1,000	-----	-----	3,850	5,200
Glenn	30,000	-----	8,500	-----	4,500	-----
Humboldt*	-----	-----	-----	-----	-----	-----
Inyo	2,200	-----	-----	-----	-----	-----
Kern	75,000	-----	12,000	-----	300	-----
Kings	108,500	4,400	4,650	-----	-----	-----
Lake	52,685	-----	1,320	-----	-----	-----
Lassen	955	-----	1,145	-----	-----	-----
Los Angeles	26,970	2,055	20,925	490	128,900	22,725
Madera	4,285	-----	-----	-----	40	-----
Marin	-----	-----	2,200	475	35	15
Mariposa	1,600	-----	800	-----	300	-----
Mendocino*	-----	-----	-----	-----	-----	-----
Merced	17,000	2,500	-----	-----	1,600	200
Modoc	-----	-----	975	140	-----	-----
Mono	-----	-----	-----	-----	-----	-----
Monterey	11,000	-----	100	-----	7	-----
Napa	120,900	58,500	33,000	1,950	415	190
Nevada	1,800	-----	-----	-----	300	50
Orange	20,180	6,140	-----	-----	33,418	46,916
Placer	6,400	3,000	104,200	182,300	1,000	800
Plumas	-----	-----	-----	-----	-----	-----
Riverside	36,096	6	-----	-----	373,538	8,052
Sacramento	25,000	48,000	30,000	73,000	1,200	900
San Benito	93,000	3,000	7,000	-----	-----	-----
San Bernardino	16,000*	4,000	-----	-----	145,000	40,000
San Diego	43,500	30,000	-----	-----	190,000	65,000
San Francisco*	-----	-----	-----	-----	-----	-----
San Joaquin	31,310	5,361	5,716	592	291	-----
San Luis Obispo	159,500	30,850	43,100	10,000	13,500	6,800
San Mateo	31,000	-----	-----	-----	110	-----
Santa Barbara	1,320	380	1,895	325	82,940	57,490
Santa Clara	3,750,120	366,900	48,420	38,100	359	665
Santa Cruz	154,860	2,900	19,386	6,470	75	38
Shasta	70,000	-----	6,500	-----	250	-----
Sierra	-----	-----	-----	-----	-----	-----
Siskiyou*	-----	-----	-----	-----	-----	-----
Solano	270,175	-----	107,140	-----	2,340	-----
Sonoma	408,970	183,470	43,610	6,390	680	300
Stanislaus	10,300	400	-----	-----	80	40
Sutter	30,600	600	34,000	950	500	-----
Tehama	82,240	7,410	16,030	3,800	325	290
Trinity	800	300	500	100	-----	-----
Tulare	322,355	14,865	3,025	200	20,165	500
Tuolumne	-----	-----	275	160	100	75
Ventura	27,330	-----	-----	-----	67,410	2,670
Yolo	120,000	-----	-----	-----	1,200	-----
Yuba	17,900	4,100	3,400	410	3,700	1,900
Totals	6,576,411	814,707	668,367	330,212	1,080,900	261,052

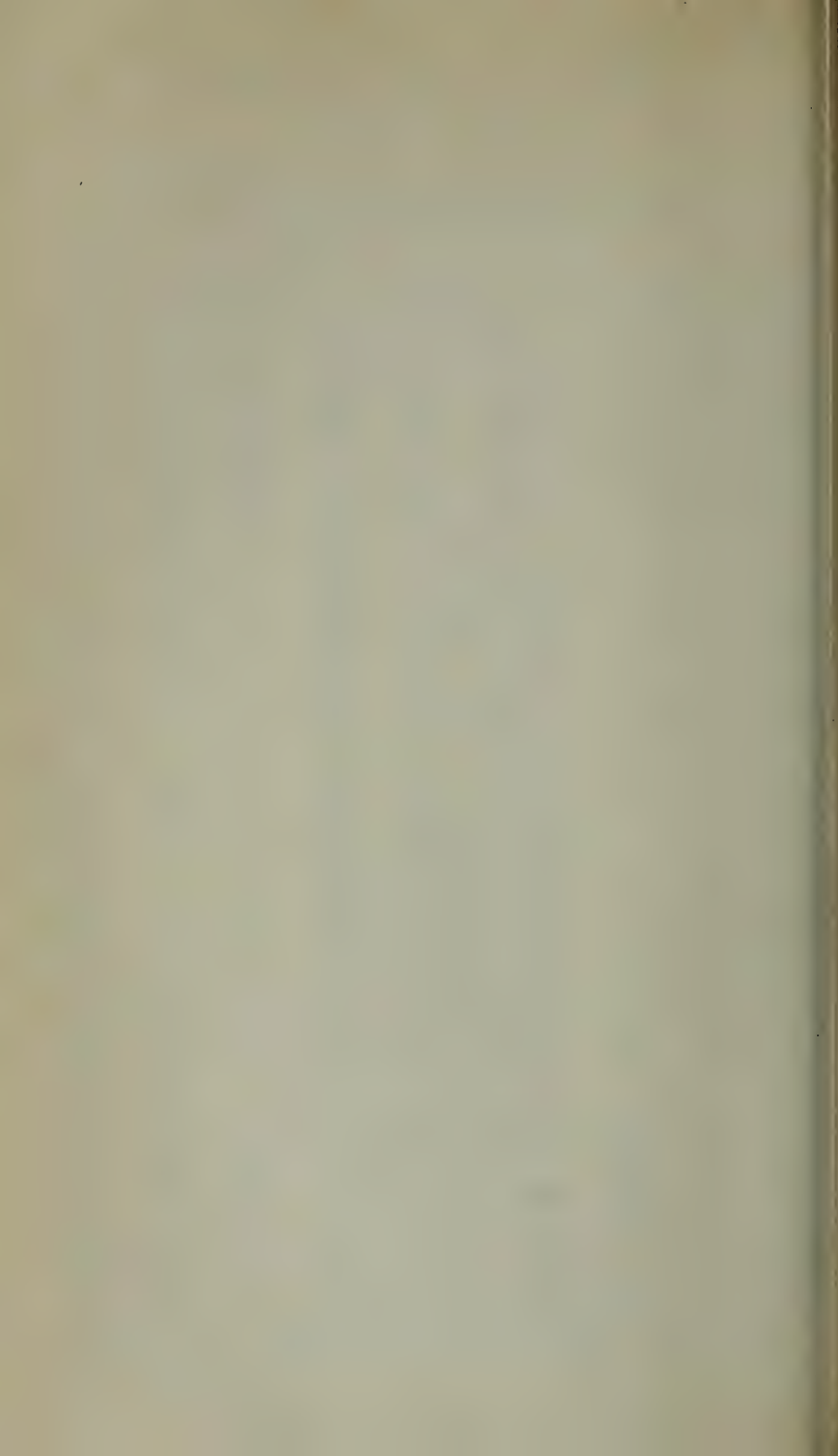
* No report.

SCHEDULE H—Continued.

Number of Fruit Trees Growing in Spring of 1903.

Counties.	Orange.		Almond.		Walnut.	
	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.
Alameda	2,300	100	79,000	4,000	2,000	300
Alpine						
Amador	360	50	3,020	425	90	40
Butte	328,000		15,000		910	
Calaveras	300	300	1,000	500	400	400
Colusa	3,315	2,000	14,700	5,300	1,310	625
Contra Costa	1,105	125	145,575	51,825	2,900	2,260
Del Norte*						
El Dorado	1,275	800	2,000	600	500	200
Fresno	27,000	3,200	5,070	2,030	2,540	360
Glenn						
Humboldt*						
Inyo			200		375	
Kern	5,000		1,200		100	
Kings						
Lake			4,970		5,400	
Lassen			25		190	
Los Angeles	527,600	258,650	44,935	9,235	78,710	57,520
Madera	150	100	1,075		50	
Marin	325	60	130	35	55	40
Mariposa	800		700		400	
Mendocino*						
Merced	8,000	2,500	17,000	4,000	800	200
Modoc						
Mono						
Monterey	58	15	610	85	240	
Napa	3 295	210	43,980	9,900	9,430	2,240
Nevada	375	40	530	25	425	60
Orange	403,460	104,695			109,614	72,480
Placer	23,400	18,400	5,900	3,400	1,520	700
Plumas						
Riverside	945,899	187,251	11,216	4	825	112
Sacramento	25,000	21,000	33,000	31,000	2,000	1,800
San Benito	100		8,500		1,500	1,000
San Bernardino	950,000	610,000	1,500	450	3,700	450
San Diego	75,000	15,000	6,500	3,500	6,000	8,000
San Francisco*						
San Joaquin	2,114	1,185	11,146	5,214	490	310
San Luis Obispo	3,650	1,250	5,150	400	22,200	7,900
San Mateo	118		560		500	
Santa Barbara	1,165	580	1,420		16,590	13,425
Santa Clara	970	695	15,150	4,820	9,015	2,300
Santa Cruz	137	97	413	58	1,844	3,720
Shasta	1,000		2,000		250	
Sierra					15	
Siskiyou*						
Solano	3,310		107,150		3,840	
Sonoma	8,340	2,470	6,710	3,310	3,640	1,710
Stanislaus	600	160	720	40	240	20
Sutter	1,100		30,700	300	1,045	100
Tehama	2,400	6,840	62,175	825	3,920	550
Trinity						
Tulare	112,565	46,755	1,000	200		
Tuolumne	325	100	325	50	860	850
Ventura	92,045	16,790	18,135	600	63,040	9,590
Yolo	7,000		100,000		3,000	
Yuba	33,800	28,100	6,400	640	2,005	360
Totals	3,602,756	1,329,518	817,490	142,771	364,478	189,622

* No report.



VALUATIONS AND RATES OF TAXATION—1904.

SCHEDULE A.

Showing Amount of Property upon which the State Rate of Taxation was Based, and the Rate for 1904.

Value returned by Auditors.....	\$1,480,719,975
Railroad assessments by Board.....	69,669,566
Amount upon which tax is based.....	<u>\$1,550,389,541</u>

Amount to be Raised for Fifty-sixth Fiscal Year.

		Rate
General Fund.....	\$4,600,000	31.2
School Fund	2,617,993	17.8
Interest and Sinking Fund	141,435	1.0
University Fund.....		2.0
High Schools Fund.....		1.5
	<u>\$7,359,428</u>	<u>53.5</u>

SCHEDULE B.

Number of Acres of Land Assessed, as per Auditors' Statements, and Valuation of Real Estate and Improvements, for 1904.

Counties.	Acres.	Value of Real Estate other than City and Town Lots.	Value of City and Town Lots.	Value of All Real Estate.	Value of Improvements on Real Estate, other than City and Town Lots.	Value of Improvements on City and Town Lots.	Value of All Improvements.
Alameda.....	459,394	\$16,184,375	\$39,843,300	\$56,027,675	\$3,719,600	\$30,894,055	\$34,613,655
Alpine.....	52,592	219,485	1,235	220,720	175,937	2,420	178,357
Amador.....	266,809	2,537,192	273,280	2,810,472	807,262	753,983	1,561,245
Butte.....	891,287	9,057,952	1,026,160	10,084,112	1,204,475	1,595,435	2,799,910
Calaveras.....	467,960	3,098,640	188,620	3,287,260	1,201,425	629,615	1,831,040
Colusa.....	601,536	8,602,377	283,495	8,885,872	575,433	607,865	1,183,298
Contra Costa.....	451,300	9,406,210	1,619,150	11,025,360	2,786,160	1,246,335	4,032,495
Del Norte.....	209,338	2,457,815	61,370	2,519,185	150,014	139,860	289,874
El Dorado.....	642,170	2,147,185	158,015	2,305,200	701,310	433,390	1,134,700
Fresno.....	1,763,870	17,247,388	3,757,748	21,005,136	3,206,048	3,921,735	7,127,783
Glenn.....	620,451	7,757,688	158,640	7,916,328	568,141	206,325	774,466
Humboldt.....	1,503,161	13,880,790	3,613,139	17,493,929	1,120,240	2,069,285	3,189,525
Inyo.....	203,721	1,021,983	114,132	1,136,115	379,718	175,643	555,361
Kern.....	2,808,350	11,458,635	1,330,940	12,789,575	1,998,779	1,764,170	3,762,949
Kings.....	685,051	4,512,427	484,495	4,996,922	544,232	635,460	1,179,692
Lake.....	360,857	1,897,170	137,465	2,034,635	596,575	128,920	725,495
Lassen.....	589,308	2,700,080	91,843	2,791,923	402,968	183,165	586,133
Los Angeles.....	862,515	26,304,680	83,415,050	109,719,730	5,781,255	43,140,425	48,921,680
Madera.....	724,333	3,999,025	287,270	4,286,295	462,065	224,225	686,290
Marin.....	326,984	5,611,150	2,535,440	8,146,590	1,163,730	2,332,150	3,495,880
Mariposa.....	774,389	1,529,876	34,142	1,564,018	325,387	98,750	424,117
Mendocino.....	1,466,467	6,881,271	585,319	7,466,590	1,091,895	853,770	1,945,665
Merced.....	1,182,834	9,253,023	526,952	9,779,975	642,626	662,725	1,305,351
Modoc.....	449,963	1,773,255	60,864	1,834,119	422,260	215,365	637,625
Mono.....	162,599	470,674	20,525	491,199	181,300	93,530	274,830
Monterey.....	1,422,939	10,633,435	1,547,595	12,181,030	1,587,330	1,287,680	2,875,010
Napa.....	417,986	4,925,620	1,096,245	6,021,865	2,498,470	1,818,520	4,316,990
Nevada.....	483,762	2,364,235	401,170	2,765,405	1,414,525	1,272,030	2,686,555

Orange	445,710	6,122,545	2,268,670	8,391,215	1,190,175	1,631,845	2,872,020
Placer	640,318	3,954,725	413,760	4,368,485	1,265,150	911,545	2,176,695
Plumas	523,967	3,050,666	35,935	3,086,601	332,467	149,366	481,833
Riverside	933,260	5,522,851	1,252,334	6,775,185	2,792,495	1,886,740	4,679,240
Sacramento	606,885	10,061,160	8,842,830	18,903,990	1,638,340	8,149,580	9,787,920
San Benito	562,382	3,890,965	288,035	4,179,000	618,600	370,000	988,600
San Bernardino	459,985	6,646,255	2,154,525	8,800,780	2,400,820	2,620,245	5,021,065
San Diego	1,246,476	4,525,687	7,259,479	11,783,166	1,034,237	3,429,174	4,463,411
San Francisco	27,000	3,097,750	290,402,355	293,500,085	310,600	86,471,365	86,781,965
San Joaquin	874,347	15,051,293	6,053,430	21,104,723	1,810,953	5,146,653	6,957,606
San Luis Obispo	1,539,654	7,615,989	997,958	8,613,947	804,857	1,122,235	1,927,692
San Mateo	289,642	8,349,505	2,010,635	10,360,140	2,922,110	1,050,755	3,972,865
Santa Barbara	1,078,638	7,785,105	3,354,815	11,139,920	1,071,785	2,488,320	3,560,105
Santa Clara	719,279	21,618,185	12,745,050	34,363,235	7,301,960	7,826,130	15,128,090
Santa Cruz	260,063	4,500,205	2,054,995	7,155,200	1,653,600	1,800,850	3,454,450
Shasta	1,320,578	5,407,225	545,350	5,952,575	1,596,275	939,400	2,535,675
Sierra	315,162	1,077,660	57,185	1,134,845	241,390	231,780	473,170
Siskiyou	1,684,735	6,590,801	247,600	6,838,401	1,120,430	662,730	1,783,160
Solano	519,950	9,901,107	1,186,807	11,087,914	1,755,720	2,544,316	4,300,036
Sonoma	874,574	13,589,220	3,653,750	17,122,970	3,984,020	3,531,395	7,465,415
Stanislaus	1,125,439	8,502,310	595,650	9,097,960	765,680	764,920	1,530,600
Sutter	374,513	4,101,691	83,155	4,184,846	704,280	162,295	866,575
Tehama	1,225,592	6,249,445	576,855	6,826,300	850,640	942,375	1,793,015
Trinity	540,476	1,285,731	28,486	1,314,217	229,576	92,192	321,768
Tulare	1,360,458	9,252,344	796,085	10,048,429	1,598,789	1,236,925	2,835,714
Tuolumne	403,049	4,078,790	261,080	4,339,870	1,641,745	539,465	2,181,210
Ventura	581,120	5,034,371	712,419	5,746,790	794,675	610,000	1,404,675
Yolo	595,287	10,027,080	793,630	10,820,710	1,110,440	1,285,055	2,395,495
Yuba	366,049	2,402,890	417,475	2,820,365	451,815	912,500	1,364,315
Totals	\$42,346,564	\$387,227,187	\$194,213,912	\$881,441,099	\$79,652,784	\$236,947,167	\$316,600,351

SCHEDULE C.

Value of Property Mortgaged, Assessed Value of Mortgages, etc., 1904.

Counties.	Assessed Value of Property Affected by Mortgage.	Assessed Value of Mortgages.	Per Cent of Mortgages to Total Value Real Estate and Im- provements.
Alameda	\$29,005,600	\$19,840,100	21.88
Alpine	36,479	26,150	6.95
Amador	398,677	398,677	9.12
Butte	2,989,720	1,993,147	15.47
Calaveras	1,415,000	770,085	15.04
Colusa	4,456,925	1,782,770	17.70
Contra Costa	4,400,000	3,550,065	23.57
Del Norte	548,504	285,191	10.15
El Dorado	584,670	325,985	9.48
Fresno	8,431,672	5,619,736	20.00
Glenn	2,682,000	1,598,825	18.40
Humboldt	4,275,600	2,573,453	12.44
Inyo	450,200	251,798	14.90
Kern	1,632,072	1,408,947	8.51
Kings	1,729,236	1,116,832	18.08
Lake	700,000	448,965	16.27
Lassen	520,272	390,209	11.55
Los Angeles	5,550,000	3,880,445	2.45
Madera	799,230	507,815	10.21
Marin	3,075,355	2,328,910	20.00
Mariposa	319,423	121,726	6.18
Mendocino	2,150,050	1,531,625	16.27
Merced	3,678,245	2,408,813	21.73
Modoc	472,500	383,683	15.60
Mono	73,480	44,418	5.80
Monterey	2,310,040	1,979,500	13.14
Napa	1,885,420	1,452,285	14.04
Nevada	625,000	445,970	8.18
Orange	278,780	223,025	2.00
Placer	1,619,400	942,640	14.40
Plumas	638,721	292,075	8.18
Riverside	1,049,390	476,996	4.16
Sacramento	6,300,000	1,073,240	3.74
San Benito	1,601,790	1,253,450	24.25
San Bernardino	1,926,435	916,820	6.63
San Diego	3,200,000	2,051,460	12.62
San Francisco	80,500,000	64,008,543	16.83
San Joaquin	7,000,000	4,310,473	15.36
San Luis Obispo	2,183,617	1,701,629	16.14
San Mateo	2,965,750	1,403,455	10.00
Santa Barbara	3,085,400	2,323,813	15.80
Santa Clara	7,596,360	7,596,360	15.35
Santa Cruz	2,085,865	1,464,050	13.80
Shasta	884,170	647,665	7.63
Sierra	115,495	36,490	2.27
Siskiyou	1,414,300	1,026,940	11.91
Solano	2,623,222	2,623,222	17.04
Sonoma	5,497,220	3,828,600	15.57
Stanislaus	2,975,615	2,275,725	21.41
Sutter	1,459,870	1,014,465	20.08
Tehama	4,172,680	1,443,670	16.75
Trinity	167,543	129,908	8.00
Tulare	2,540,523	2,436,621	18.90
Tuolumne	2,000,000	1,060,195	16.25
Ventura	1,538,276	1,419,564	19.85
Yolo	2,842,170	1,801,290	13.63
Yuba	936,030	703,095	16.80
Totals	\$236,393,992	\$168,186,954	-----

SCHEDULE D.

Showing Value of All Property as Returned by Auditors, and after Equalization by the Board, for 1904.

Counties.	Value of Real Estate and Improvements.	Personal Property, Other than Money and Solvent Credits.	Money and Solvent Credits.	Value of Preceding Columns.	Railroad Assessment.	Total Value of All Property.
Alameda	\$90,641,330	\$15,597,820	\$744,784	\$106,983,934	\$2,242,264	\$109,226,198
Alpine	399,077	57,164	4,588	460,829		460,829
Amador	4,371,717	654,321	19,978	5,046,016	120,000	5,066,016
Butte	12,884,022	2,659,324	208,559	15,751,905	1,120,259	16,872,164
Calaveras	5,118,300	898,630	31,565	6,048,495	209,975	6,258,470
Colusa	10,069,170	1,663,704	168,654	11,901,528	514,569	12,416,097
Contra Costa	15,057,855	3,806,425	375,310	19,239,590	1,772,386	21,011,976
Del Norte	2,809,059	280,192	7,435	3,096,686		3,096,686
El Dorado	3,439,900	846,420	16,320	4,302,640	473,250	4,775,890
Fresno	28,132,919	5,406,111	212,588	33,751,618	3,774,788	37,526,406
Glenn	8,690,794	1,335,859	140,036	10,166,689	690,544	10,857,233
Humboldt	20,683,454	2,835,143	570,886	24,089,483		24,089,483
Inyo	1,691,476	638,194	37,484	2,367,154	137,985	2,505,139
Kern	16,552,524	4,750,533	98,345	21,401,402	3,452,453	24,853,855
Kings	6,176,614	1,261,404	174,547	7,612,565	603,770	8,216,335
Lake	2,760,130	629,586	48,200	3,437,916		3,437,916
Lassen	3,378,056	1,529,280	137,033	5,044,369	223,700	5,268,069
Los Angeles	158,641,410	35,817,065	771,569	195,230,044	5,483,057	200,713,101
Madera	4,972,585	1,256,040	28,565	6,257,190	1,146,373	7,403,563
Marin	11,642,470	1,326,710	36,980	13,006,160	771,837	13,777,997
Mariposa	1,988,135	426,971	900	2,416,006		2,416,006
Mendocino	9,412,255	2,111,497	94,092	11,617,844	329,547	11,947,391
Merced	11,085,326	2,168,843	26,775	13,280,944	1,908,347	15,189,291
Modoc	2,461,744	1,459,723	100,478	4,021,945		4,021,945
Mono	766,029	291,515	9,340	1,066,884	62,015	1,128,899
Monterey	15,056,040	2,171,665	95,420	17,323,125	2,116,178	19,439,303
Napa	10,338,855	2,176,730	288,115	12,803,700	711,450	13,515,150
Nevada	5,451,960	1,025,980	57,030	6,534,970	726,730	7,261,700
Orange	11,263,235	1,703,325	60,450	13,027,010	1,451,868	14,478,878
Placer	6,545,180	945,025	94,730	7,584,935	2,349,647	9,934,582
Plumas	3,568,434	363,393	16,578	3,948,405	105,717	4,054,122
Riverside	11,454,425	1,381,065	31,395	12,866,885	2,706,800	15,573,685
Sacramento	28,691,910	5,304,970	598,260	34,595,140	1,570,337	36,165,477
San Benito	5,167,600	1,041,065	51,575	6,260,240	265,142	6,525,382
San Ber'dino	13,821,845	1,709,420	127,838	15,659,103	5,072,719	20,731,822
San Diego	16,248,577	2,832,641	138,766	19,219,984	2,552,183	21,772,166
S. Francisco	380,282,050	88,961,727	33,648,682	502,892,459	161,098	503,053,557
San Joaquin	28,062,329	4,200,043	991,262	33,253,634	2,726,922	35,980,556
S. L. Obispo	10,541,639	2,164,305	190,661	12,896,605	1,231,435	14,128,040
San Mateo	14,333,005	2,678,300	65,125	17,076,430	380,863	17,457,293
S'ta Barbara	14,700,025	2,084,866	120,180	16,905,071	1,916,395	18,821,466
Santa Clara	49,491,325	5,070,355	482,170	55,043,850	1,575,687	56,619,537
Santa Cruz	10,609,650	1,487,695	99,100	12,196,445	701,999	12,898,444
Shasta	8,488,250	1,733,694	64,020	10,285,964	1,663,049	11,949,013
Sierra	1,608,015	195,360	4,650	1,808,025	166,412	1,974,537
Siskiyou	8,621,561	1,573,341	171,120	10,366,022	1,685,337	12,051,359
Solano	15,387,950	2,302,606	103,023	17,793,579	1,109,342	18,902,921
Sonoma	24,588,385	3,650,330	367,905	28,606,620	1,996,416	30,603,036
Stanislaus	10,628,560	1,980,050	145,770	12,754,380	1,617,221	14,371,601
Sutter	5,051,421	994,276	28,270	6,073,967	602,063	6,676,030
Tehama	8,619,315	2,182,560	111,310	10,913,185	1,083,762	11,996,947
Trinity	1,635,985	341,988	16,870	1,994,843		1,994,843
Tulare	12,884,143	2,543,958	126,144	15,554,245	2,724,421	18,278,666
Tuolumne	6,521,080	934,065	20,595	7,475,740	257,070	7,732,810
Ventura	7,151,465	1,513,071	107,755	8,772,291	1,571,013	10,343,304
Yolo	13,216,205	1,698,102	285,790	15,200,097	1,324,374	16,524,471
Yuba	4,184,680	1,086,225	162,195	5,433,100	508,597	5,941,697
Totals	\$1,198,031,540	\$239,740,670	\$42,937,765	\$1,480,719,975	\$69,669,566	\$1,550,389,541

SCHEDULE E.

Showing Assessment and Apportionment of Railways for 1904.

Name of each Railway Assessed, and Name of the County to which Assessment is Apportioned.	Number of Miles of Railway Operated in the State.	Number of Miles of each Railway in each County.	Value per Mile of each Railway.	Total Assessment of each Railway.	Amount of Assessment of each Railway Apportioned to each County.
Central Pacific Railway	746.76		\$20,086 77	\$15,000,000	
Alameda		33.14			\$1,670,014
Butte		45.00			903,905
Fresno		32.00			642,777
Madera		29.06			583,721
Merced		36.75			738,189
Nevada		30.25			607,625
Placer		112.75			2,264,783
Sacramento		41.00			823,558
San Francisco		2.46			49,414
San Joaquin		56.75			1,139,924
Santa Clara		8.50			170,738
Shasta		82.08			1,648,722
Sierra		2.15			43,187
Siskiyou		83.18			1,670,818
Stanislaus		22.63			454,564
Sutter		10.00			200,868
Tehama		40.54			814,318
Tulare		12.65			254,098
Yuba		15.87			318,777
South Pacific Coast Railway ..	96.16		10,500 00	1,009,680	
Alameda		31.46			330,330
Santa Clara		37.00			388,500
Santa Cruz		27.70			290,850
Southern Pacific Railroad	2,388.54		15,000 00	35,828,100	
Alameda		11.90			178,500
Amador		8.00			120,000
Butte		13.90			208,500
Calaveras		10.46			156,900
Colusa		33.91			508,650
Contra Costa		80.05			1,200,750
El Dorado		31.55			473,250
Fresno		172.93			2,593,950
Glenn		45.70			685,500
Kern		181.23			2,718,450
Kings		23.32			349,800
Los Angeles		259.34			3,890,100
Madera		21.00			315,000
Merced		52.50			787,500
Monterey		130.03			1,950,450
Napa		47.43			711,450
Orange		48.15			722,250
Riverside		92.60			1,389,000
Sacramento		49.25			738,750
San Benito		17.65			264,750
San Bernardino		47.53			712,950
San Diego		87.79			1,316,850
San Francisco		7.36			110,400
San Joaquin		71.59			1,073,850
San Luis Obispo		72.60			1,089,000
San Mateo		25.10			376,500
Santa Barbara		118.47			1,777,050
Santa Clara		67.10			1,006,500
Santa Cruz		27.15			407,250
Solano		73.45			1,101,750
Sonoma		30.52			457,800
Stanislaus		56.86			852,900
Sutter		26.63			399,450
Tehama		17.29			259,350
Tulare		123.83			1,857,450
Ventura		104.10			1,561,500
Yolo		87.80			1,317,000
Yuba		12.47			187,050

SCHEDULE E—Continued.

Showing Assessment and Apportionment of Railways for 1904.

Name of each Railway Assessed, and Name of the County to which Assessment is Apportioned.	Number of Miles of Railway Operated in the State.	Number of Miles of each Railway in each County.	Value per Mile of each Railway.	Total Assessment of each Railway.	Amount of Assessment of each Railway Apportioned to each County.
Southern California Motor Road	12.00		\$5,000 00	\$60,000	
Riverside		6.00			\$30,000
San Bernardino		6.00			30,000
Carson and Colorado Railway	107.62		1,858 39	200,000	
Inyo		74.25			137,985
Mono		33.37			62,015
San Francisco and North Pacific Railway (California Northwestern Ry. Co. Lessee)	165.52		12,083 13	2,000,000	
Marin		29.50			356,452
Mendocino		26.00			314,162
Sonoma		110.02			1,329,386
Southern California Railway	478.066		11,504 63	5,500,000	
Los Angeles		76.708			882,502
Orange		62.691			721,240
Riverside		96.928			1,115,127
San Bernardino		136.691			1,572,587
San Diego		105.048			1,208,544
Atchison, Topeka and Santa Fé Railway	712.52		9,000 00	6,412,680	
Alameda		5.61			50,490
Contra Costa		61.28			551,520
Fresno		56.99			512,910
Kern		77.77			699,930
Kings		27.68			249,120
Madera		26.44			237,960
Merced		40.36			363,240
San Bernardino		290.02			2,610,180
San Joaquin		39.50			355,500
Stanislaus		21.14			190,260
Tulare		65.73			591,570
North Shore Railroad	84.56		7,100 58	600,000	
Marin		58.50			415,385
Sonoma		26.00			184,615
Pacific Coast Railway	76.10		3,285 15	250,000	
San Luis Obispo		39.50			129,763
Santa Barbara		36.60			120,237
Pajaro Valley Con. R. R.	33.63		4,460 30	150,000	
Monterey		32.84			146,476
Santa Cruz		.79			3,524
Nevada County Narrow Gauge Railroad	22.50		5,000 00	112,500	
Nevada		18.78			93,900
Placer		3.72			18,600
Nevada-California-Oregon Ry.	115.70		1,944 69	225,000	
Lassen		112.44			218,660
Sierra		3.26			6,340
Sierra Valleys Railway	36.48		1,200 00	43,776	
Lassen		4.20			5,040
Plumas		32.28			38,736
Alameda and San Joaquin Railroad	35.88		4,180 59	150,000	
Alameda		2.79			11,664
San Joaquin		33.09			138,336
Sierra Railway of California	75.94		5,500 00	417,670	
Calaveras		9.65			53,075
Stanislaus		19.55			107,525
Tuolumne		46.74			257,070
Gualala Mill Railroad	13.00		3,076 92	40,000	
Mendocino		5.00			15,385
Sonoma		8.00			24,615
Lake Tahoe Railway	16.10		3,105 59	50,000	
Nevada		1.10			2,416
Placer		15.00			46,584

SCHEDULE E—Continued.

Showing Assessment and Apportionment of Railways for 1904.

Name of each Railway Assessed, and Name of the County to which Assessment is Appor- tioned.	Number of Miles of Railway Operated in the State.	Number of Miles of each Rail- way in each County.	Value per Mile of each Railway.	Total Assess- ment of each Railway.	Amount of Assessment of each Rail- way Appor- tioned to each County.
Boca and Loyaltan R. R.	42.40		\$4,716 98	\$200,000 00	
Nevada		3.50			\$16,509
Plumas		14.20			66,981
Sierra		24.70			116,510
San Pedro, Los Angeles and Salt Lake Railroad	102.24		9,000 00	920,160 00	
Los Angeles		75.37			678,330
Riverside		17.39			156,510
San Bernardino		9.48			85,320
The Pullman Company (roll- ing stock)	2,864.61		174 55	500,000 00	
Alameda		8.40			1,466
Butte		45.00			7,854
Colusa		33.91			5,919
Contra Costa		115.25			20,116
Fresno		144.09			25,151
Glenn		28.90			5,044
Kern		195.21			34,073
Kings		27.79			4,850
Los Angeles		184.05			32,125
Madera		55.53			9,692
Merced		111.25			19,418
Monterey		110.30			19,252
Nevada		30.25			5,280
Orange		48.00			8,378
Placer		112.75			19,680
Riverside		92.60			16,163
Sacramento		46.00			8,029
San Benito		2.25			392
San Bernardino		353.38			61,682
San Diego		153.48			26,789
San Francisco		7.36			1,284
San Joaquin		110.64			19,312
San Luis Obispo		72.60			12,672
San Mateo		25.00			4,363
Santa Barbara		109.47			19,108
Santa Clara		57.00			9,949
Santa Cruz		2.15			375
Shasta		82.08			14,327
Sierra		2.15			375
Siskiyou		83.18			14,519
Solano		43.50			7,592
Stanislaus		68.59			11,972
Sutter		10.00			1,745
Tehama		57.83			10,094
Tulare		122.05			21,303
Ventura		54.50			9,513
Yolo		42.25			7,374
Yuba		15.87			2,770

SCHEDULE F.

Showing Apportionment of Railways to Counties for 1904.

Name of County and Road.	Amount Apportioned.	Total Assessment.
Alameda—		
Central Pacific.....	\$1,670,014	
South Pacific Coast.....	330,330	
Southern Pacific.....	178,500	
Atchison, Topeka and Santa Fé.....	50,490	
Alameda and San Joaquin.....	11,664	
The Pullman Company.....	1,466	
		\$2,242,464
Amador—		
Southern Pacific.....	120,000	
		120,000
Butte—		
Central Pacific.....	903,905	
Southern Pacific.....	208,500	
The Pullman Company.....	7,854	
		1,120,259
Calaveras—		
Southern Pacific.....	156,900	
Sierra Railway of California.....	53,075	
		209,975
Colusa—		
Southern Pacific.....	508,650	
The Pullman Company.....	5,919	
		514,569
Contra Costa—		
Southern Pacific.....	1,200,750	
Atchison, Topeka and Santa Fé.....	551,520	
The Pullman Company.....	20,116	
		1,772,386
El Dorado—		
Southern Pacific.....	473,250	
		473,250
Fresno—		
Central Pacific.....	642,777	
Southern Pacific.....	2,593,950	
Atchison, Topeka and Santa Fé.....	512,910	
The Pullman Company.....	25,151	
		3,774,788
Glenn—		
Southern Pacific.....	685,500	
The Pullman Company.....	5,044	
		690,544
Inyo—		
Carson and Colorado.....	137,985	
		137,985
Kern—		
Southern Pacific.....	2,718,450	
Atchison, Topeka and Santa Fé.....	699,930	
The Pullman Company.....	34,073	
		3,452,453
Kings—		
Southern Pacific.....	349,800	
Atchison, Topeka and Santa Fé.....	249,120	
The Pullman Company.....	4,850	
		603,770
Lassen—		
Nevada-California-Oregon.....	218,660	
Sierra Valleys.....	5,040	
		223,700
Los Angeles—		
Southern Pacific.....	3,890,100	
Southern California.....	882,502	
San Pedro, Los Angeles and Salt Lake.....	678,330	
The Pullman Company.....	32,125	
		5,483,057

SCHEDULE F—Continued.

Showing Apportionment of Railways to Counties for 1904.

Name of County and Road.	Amount Apportioned.	Total Assessment.
Madera—		
Central Pacific	\$583,721	
Southern Pacific	315,000	
Atchison, Topeka and Santa Fé	237,960	
The Pullman Company	9,692	\$1,146,373
Marin—		
San Francisco and North Pacific	356,452	
North Shore	415,385	771,837
Mendocino—		
San Francisco and North Pacific	314,162	
Gualala Mill	15,385	329,547
Merced—		
Central Pacific	738,189	
Southern Pacific	787,500	
Atchison, Topeka and Santa Fé	363,240	
The Pullman Company	19,418	1,908,347
Mono—		
Carson and Colorado	62,015	62,015
Monterey—		
Southern Pacific	1,950,450	
Pajaro Valley Consolidated	146,476	
The Pullman Company	19,252	2,116,178
Napa—		
Southern Pacific	711,450	711,450
Nevada—		
Central Pacific	607,625	
Nevada County Narrow Gauge	93,900	
Lake Tahoe	3,416	
Boca and Loyalton	16,509	
The Pullman Company	5,280	726,730
Orange—		
Southern Pacific	722,250	
Southern California	721,240	
The Pullman Company	8,378	1,451,868
Placer—		
Central Pacific	2,264,783	
Nevada County Narrow Gauge	18,600	
Lake Tahoe	46,584	
The Pullman Company	19,680	2,349,647
Plumas—		
Sierra Valleys	38,736	
Boca and Loyalton	66,981	105,717
Riverside—		
Southern Pacific	1,389,000	
Southern California Motor	30,000	
Southern California	1,115,127	
San Pedro, Los Angeles and Salt Lake	156,510	
The Pullman Company	16,163	2,706,800
Sacramento—		
Central Pacific	823,558	
Southern Pacific	738,750	
The Pullman Company	8,029	1,570,337
San Benito—		
Southern Pacific	264,750	
The Pullman Company	392	265,142

SCHEDULE F—Continued.

Showing Apportionment of Railways to Counties for 1904.

Name of County and Road.	Amount Apportioned.	Total Assessment.
San Bernardino—		
Southern Pacific	\$712,950	
Southern California Motor	30,000	
Southern California	1,572,587	
Atchison, Topeka and Santa Fé	2,610,180	
San Pedro, Los Angeles and Salt Lake	85,320	
The Pullman Company	61,682	
		\$5,072,719
San Diego—		
Southern Pacific	1,316,850	
Southern California	1,208,544	
The Pullman Company	26,789	
		2,552,183
San Francisco—		
Central Pacific	49,414	
Southern Pacific	110,400	
The Pullman Company	1,284	
		161,098
San Joaquin—		
Central Pacific	1,139,924	
Southern Pacific	1,073,850	
Atchison, Topeka and Santa Fé	355,500	
Alameda and San Joaquin	138,336	
The Pullman Company	19,312	
		2,726,922
San Luis Obispo—		
Southern Pacific	1,089,000	
Pacific Coast	129,763	
The Pullman Company	12,672	
		1,231,435
San Mateo—		
Southern Pacific	376,500	
The Pullman Company	4,363	
		380,863
Santa Barbara—		
Southern Pacific	1,777,050	
Pacific Coast	120,237	
The Pullman Company	19,108	
		1,916,395
Santa Clara—		
Central Pacific	170,738	
South Pacific Coast	388,500	
Southern Pacific	1,006,500	
The Pullman Company	9,949	
		1,575,687
Santa Cruz—		
South Pacific Coast	290,850	
Southern Pacific	407,250	
Pajaro Valley Con.	3,524	
The Pullman Company	375	
		701,999
Shasta—		
Central Pacific	1,648,722	
The Pullman Company	14,327	
		1,663,049
Sierra—		
Central Pacific	43,187	
Nevada-California-Oregon	6,340	
Boca and Loyalton	116,510	
The Pullman Company	375	
		166,412
Siskiyou—		
Central Pacific	1,670,818	
The Pullman Company	14,519	
		1,685,337
Solano—		
Southern Pacific	1,101,750	
The Pullman Company	7,592	
		1,109,342

SCHEDULE F—*Continued.**Showing Apportionment of Railways to Counties for 1904.*

Name of County and Road.	Amount Apportioned.	Total Assessment.
Sonoma—		
Southern Pacific	\$457,800	
San Francisco and North Pacific	1,329,386	
North Shore	184,615	
Gualala Mill	24,615	
		\$1,996,416
Stanislaus—		
Central Pacific	454,564	
Southern Pacific	852,900	
Atchison, Topeka and Santa Fé	190,260	
Sierra Railway of California	107,525	
The Pullman Company	11,972	
		1,617,221
Sutter—		
Central Pacific	200,868	
Southern Pacific	399,450	
The Pullman Company	1,745	
		602,063
Tehama—		
Central Pacific	814,318	
Southern Pacific	259,350	
The Pullman Company	10,094	
		1,083,762
Tulare—		
Central Pacific	254,098	
Southern Pacific	1,857,450	
Atchison, Topeka and Santa Fé	591,570	
The Pullman Company	21,303	
		2,724,421
Tuolumne		
Sierra Railway of California	257,070	
		257,070
Ventura—		
Southern Pacific	1,561,500	
The Pullman Company	9,513	
		1,571,013
Yolo—		
Southern Pacific	1,317,000	
The Pullman Company	7,374	
		1,324,374
Yuba—		
Central Pacific	318,777	
Southern Pacific	187,050	
The Pullman Company	2,770	
		508,597
Total		\$69,669,566

SCHEDULE F—Continued.

Railroad Property Assessed by County Assessors, such as Depots, Shops, Land, Material, etc., for 1904.

Alameda—		Orange—	
Central Pacific.....	\$2,694,500	Southern California.....	\$22,175
South Pacific Coast.....	680,500	Southern Pacific.....	85,785
Southern Pacific.....	800,025	Placer—	
Atchison, Topeka and Santa Fé.....	12,000	Central Pacific.....	344,915
Amador—		Nevada County Narrow Gauge.....	1,500
Southern Pacific.....	5,000	Lake Tahoe.....	51,740
Butte—		Plumas—	
Central Pacific.....	189,335	Sierra Valleys.....	2,000
Southern Pacific.....	3,440	Boca and Loyalton.....	1,000
Calaveras—		Riverside—	
Southern Pacific.....	8,420	Southern Pacific.....	180,400
Sierra Railway of California.....	1,500	Southern California.....	27,000
Colusa—		San Pedro, Los Ang. & Salt Lake.....	8,105
Southern Pacific.....	20,498	Sacramento—	
Contra Costa—		Central Pacific.....	802,600
Southern Pacific.....	154,605	Southern Pacific.....	48,300
Atchison, Topeka and Santa Fé.....	197,225	San Benito—	
El Dorado—		Southern Pacific.....	19,935
Central Pacific.....	84,750	San Bernardino—	
Southern Pacific.....	13,650	Southern Pacific.....	87,550
Fresno—		Southern California.....	159,330
Central Pacific.....	102,525	Atchison, Topeka and Santa Fé.....	79,445
Southern Pacific.....	832,122	San Pedro, Los Ang. & Salt Lake.....	42,100
Atchison, Topeka and Santa Fé.....	62,091	San Diego—	
San Joaquin Valley.....	16,590	Southern Pacific.....	165,347
Glenn—		Southern California.....	90,227
Southern Pacific.....	17,735	San Francisco—	
Inyo—		Central Pacific.....	522,555
Carson and Colorado.....	8,800	Southern Pacific.....	2,937,120
Kern—		Central Pacific and S. Pacific.....	810,220
Southern Pacific.....	489,434	South Pacific Coast.....	82,500
Atchison, Topeka and Santa Fé.....	67,777	San Francisco & North Pacific.....	81,952
Kings—		North Shore.....	106,200
Southern Pacific.....	11,530	Santa Fé.....	207,210
Atchison, Topeka and Santa Fé.....	12,501	San Joaquin—	
Lassen—		Central Pacific.....	131,113
Nevada-California-Oregon.....	5,980	Southern Pacific.....	43,741
Los Angeles—		Atchison, Topeka and Santa Fé.....	58,203
Southern Pacific.....	1,119,340	Western Pacific.....	56,512
Southern California.....	61,670	San Luis Obispo—	
San Pedro, Los Ang. & Salt Lake.....	200,240	Southern Pacific.....	111,300
Madera—		Pacific Coast.....	60,523
Central Pacific.....	11,850	San Mateo—	
Southern Pacific.....	27,720	Southern Pacific.....	80,135
Atchison, Topeka and Santa Fé.....	10,680	Santa Barbara—	
Marin—		Southern Pacific.....	115,000
San Francisco & North Pacific.....	113,880	Pacific Coast.....	5,740
North Shore.....	228,050	Santa Clara—	
Mendocino—		Central Pacific.....	500
San Francisco & North Pacific.....	7,600	Southern Pacific.....	141,020
Merced—		South Pacific Coast.....	23,395
Central Pacific.....	20,852	Santa Cruz—	
Southern Pacific.....	13,767	Southern Pacific.....	33,030
Atchison, Topeka and Santa Fé.....	23,061	South Pacific Coast.....	28,600
Mono—		Pajaro Valley.....	2,475
Carson and Colorado.....	1,150	Shasta—	
Monterey—		Central Pacific.....	1,139,456
Southern Pacific.....	83,780	Sierra—	
Pajaro Valley.....	250	Central Pacific.....	298,215
Napa—		Boca and Loyalton.....	3,475
Southern Pacific.....	31,730	Siskiyou—	
Nevada—		Central Pacific.....	1,755,691
Central Pacific.....	218,980	Solano—	
Nevada County Narrow Gauge.....	21,925	Southern Pacific.....	29,895

SCHEDULE F—*Continued.*

*Railroad Property Assessed by County Assessors, such as Depots, Shops,
Land, Material, etc., for 1904.*

Sonoma—		Trinity—	
San Francisco & North Pacific	\$51,090	Central Pacific	\$378,480
North Shore	5,450	Tulare—	
Southern Pacific	23,815	Southern Pacific	103,775
Stanislaus—		Atchison, Topeka and Santa Fé	29,854
Central Pacific	17,945	Tuolumne—	
Southern Pacific	117,175	Sierra Railway of California	8,470
Sierra Railway of California	1,810	Ventura—	
Atchison, Topeka and Santa Fé	15,605	Southern Pacific	90,075
Sutter—		Yolo—	
Central Pacific	25,300	Central Pacific	1,740
Southern Pacific	13,605	Southern Pacific	34,665
Tehama—		Yuba—	
Central Pacific	201,740	Central Pacific	53,665
Southern Pacific	11,100	Southern Pacific	4,510
		Total	\$20,969,155

SCHEDULE F—Continued.

*Showing Assessment of Railways (Electric, Motor, Street, and Steam)
Operated in but One County, made by County Assessors.*

Name of County and Road.	Mileage.	Assessment.
Alameda—		
San Francisco, Oakland and San José Railway.....		\$600,000
San Francisco Terminal Railway (Western Pacific)		72,000
Oakland Transit Consolidated		4,589,350
Butte—		
Butte County Railroad		115,270
Colusa—		
Colusa and Lake Railroad		46,180
Contra Costa—		
Richmond Belt Railroad		12,500
Pittsburg Railroad		10,000
Del Norte—		
Hobbs, Wall & Co. (Logging)	21	21,500
El Dorado—		
El Dorado Lumber Company	14	14,000
Fresno—		
Fresno City Railway	9	30,930
Humboldt—		
Arcata and Mad River Railroad		107,185
Eureka and Klamath River Railroad		139,235
Humboldt Railroad		77,380
California and Northern Railway		66,680
San Francisco and Northwestern Railway		377,880
Buckport and Eel River Railroad		53,550
Humboldt Transit Company		6,750
Kern—		
Sunset Railroad		138,400
Power Transit (street railroad)		40,550
Los Angeles—		
Pacific Electric Railway		3,510,525
Los Angeles Railway		2,329,045
Los Angeles Pacific Railway		1,653,595
Los Angeles and Redondo Railway		481,265
Pomona Street Railway		1,300
Los Angeles Interurban Railway		474,440
Madera—		
Madera Railroad (Quarry)		2,000
Marin—		
Mill Valley and Mount Tamalpais Railway		40,000
San Rafael and San Quentin Railroad		14,300
Mariposa—		
Hill and Fowler Railroad		2,000
Mendocino—		
California Northwestern Railway		203,098
L. E. White Lumber Company		34,800
Caspar Lumber Company		18,000
Mendocino Lumber Company		13,330
Union Lumber Company		50,000
Fort Bragg Lumber Company		20,000
Southern Humboldt Lumber Company		18,500
Mono—		
Bodie Railroad		32,662
Monterey—		
Monterey and Pacific Grove Railroad	6	9,000
Nevada—		
Overton Railroad	6	39,250
Nevada County Traction Company	5	43,000
Orange—		
Santa Ana and Newport		68,250
Pacific Electric Railway	11	3,845
Placer—		
Read Lumber Company	8	27,450
Riverside—		
Perris and Lakeview Railroad		12,040
Riverside and Arlington		15,000

SCHEDULE F—Continued.

*Showing Assessment of Railways (Electric, Motor, Street, and Steam)
Operated in but One County, made by County Assessors.*

Name of County and Road.	Mileage.	Assessment.
Sacramento—		
Fair Oaks Spur		\$10,100
Sacramento Electric Street Railway		57,000
San Bernardino—		
San Bernardino and Redlands Railroad	10	20,150
Ludlow Southern Railway	6	13,000
Daggett and Borate Railway	11	24,150
San Bernardino Traction Company		57,735
Ontario and San Antonio Heights		8,735
San Diego—		
San Diego, Pacific Beach and La Jolla Railroad		18,180
San Diego, Cuyamaca, and Eastern Railroad		48,843
Coronado Railroad		32,136
National City and Otay Railroad		36,260
San Diego Electric Railway		94,735
San Francisco—		
United Railways Company		18,520,115
Presidio and Ferries Railroad		106,275
California Street Railroad		1,417,185
Geary Street, Park and Ocean Railroad		218,720
Sutter Street Railroad		28,879
San Joaquin—		
Stockton Electric Railroad		29,867
San Luis Obispo—		
Paso Robles Horse Car Company		600
San Mateo—		
United Railways Company		151,500
South San Francisco Railroad		12,000
C. A. Warren		1,000
South San Francisco Land and Improvement Company		4,000
Santa Barbara—		
Electric Street Railway		33,950
Santa Clara—		
San José Railroad	11	94,150
San José and Santa Clara Electric Railroad	12	122,260
San José and Los Gatos Interurban Railroad	21	86,960
Standard Electric Company	19	32,785
Santa Cruz—		
Santa Cruz Electric Railway	5	17,805
Santa Cruz, Capitola and Watsonville Railroad	6.30	24,235
Watsonville Transportation Company	5	25,460
Shasta—		
Iron Mountain Railroad	10.89	76,230
Terry Lumber Company Railway	15.6	15,750
Lemoine Lumber and Trading Company Railway	2	1,000
Bully Hill Copper Company Railway	1	6,000
Siskiyou—		
Yreka Railroad	6.50	30,000
Wood & Sheldon Railroad	6	5,565
McCloud River Railroad	30	141,250
Klamath Lake Railroad	15	52,500
Weed Lumber Company Railroad	5	20,050
Sonoma—		
Petaluma and Santa Rosa Railway (right of way)	18.48	12,935
Central Street Railway	2.50	3,480
Sutter—		
Marysville and Yuba City Railroad		1,000
Tuolumne—		
West Side Lumber Company (Logging)	20	77,000
Ventura—		
Ventura and Ojai Valley Railroad		500
Yuba—		
Marysville and Yuba City Railroad		4,630

SCHEDULE G.

*Showing Kinds of Personal Property Assessed, and the Assessed Value,
for 1904.*

Counties.	State, County, or Municipal Bonds.	Jewelry or Plate.	Watches.	Wine and Liquor Casks and Tanks.	Brandies and Other Liquors.	Wines.
	Value.	Value.	Value.	Value.	Value.	Value.
Alameda		\$61,000	\$90,000	\$12,600	\$83,000	\$225,000
Alpine		100	353		250	
Amador		2,320	280	950	300	150
Butte		23,230	12,720			
Calaveras		1,500	10,000	500	10,000	1,500
Colusa	\$10,250	1,175	4,962			
Contra Costa		3,550	12,700	27,000	29,950	21,780
Del Norte		270	1,340		2,700	455
El Dorado		2,110	2,600	1,925	800	1,285
Fresno	3,695	5,295	18,003	39,420	50,435	138,030
Glenn		490	470			
Humboldt		2,965	10,285			
Inyo		100	2,500			
Kern		10,000	7,500		15,000	
Kings		805	5,692	5,000	2,865	26,240
Lake		500	3,796	1,065		2,930
Lassen						
Los Angeles	26,750	363,975	123,670	171,415	128,240	73,325
Madera		510	2,850	9,500		25,000
Marin						
Mariposa			2,850		2,400	200
Mendocino		6,500	3,000		5,000	800
Merced		1,495	5,945		1,800	400
Modoc		1,020	3,298		2,465	
Mono		130	2,325		1,945	
Monterey		1,940	4,080	1,000	5,890	1,260
Napa		16,900	15,500	14,750	8,150	270,000
Nevada		2,340	2,910	200	10,230	460
Orange		1,600	16,270	2,640	1,430	3,690
Placer		6,100	12,045	300	800	
Plumas			682		3,550	
Riverside		1,640	8,115		600	
Sacramento		32,000	23,800	10,000	9,000	65,000
San Benito		1,000	1,125	3,610	330	2,230
San Bernardino		13,385	8,720	7,360	2,965	26,365
San Diego		12,500	25,600	25,600	2,250	3,000
San Francisco		755,000	160,000	97,000	810,000	311,500
San Joaquin		9,205	34,410		5,530	78,210
San Luis Obispo		2,030	4,810	700	7,460	3,400
San Mateo		10,490	5,280	3,150	9,650	
Santa Barbara		5,725	5,105			
Santa Clara		81,000	48,050	42,000	14,250	76,950
Santa Cruz		1,730	3,120	5,085	1,705	15,060
Shasta		4,440	4,685		17,545	765
Sierra		350	1,935			
Siskiyou		7,500	3,000		18,000	
Solano		3,750	4,650	6,000	18,950	5,200
Sonoma		12,950	18,440	89,600	3,450	330,000
Stanislaus		2,855	9,550	1,000	5,435	3,590
Sutter		100	2,978	150		
Tehama	5,300	1,455	7,870	30,000	25,000	149,150
Trinity		1,370	4,147	150	1,545	
Tulare		1,595	5,585		24,305	675
Tuolumne			2,000			1,000
Ventura		2,470	2,490	10,935		1,450
Yolo		1,225	4,730			3,000
Yuba		1,000	1,150		1,000	5,000
Totals	\$40,995	\$1,484,685	\$779,971	\$620,605	\$1,347,165	\$1,874,110

SCHEDULE G—Continued.

Showing Kinds of Personal Property Assessed, and the Assessed Value,
for 1904.

Counties.	Cattle—Beef.		Cattle—Stock.		Bulls and Cows—Thoroughbred.	
	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	2,200	\$66,000	3,000	\$75,000	4,000	\$160,000
Alpine	82	1,640	737	11,055		
Amador	50	1,250	11,872	118,720		
Butte	350	12,250	7,435	125,395		
Calaveras	100	3,000	12,000	180,000	10	400
Colusa			9,527	186,035		
Contra Costa	120	6,000	5,620	89,920	55	3,850
Del Norte			828	12,420		
El Dorado	120	3,000	4,240	84,800		
Fresno	2,425	60,635	28,056	420,490		
Glenn			7,841	156,937		
Humboldt	3,171	63,420	18,099	190,050	14	895
Inyo	40	1,000	16,905	202,860	50	2,500
Kern	2,000	40,000	55,000	660,000		
Kings			9,589	125,540	44	1,260
Lake	46	1,475	4,689	89,396		
Lassen	1,002	30,060	34,740	646,920		
Los Angeles		17,925		183,075		
Madera	500	12,500	25,150	377,250	25	250
Marin			4,975	64,705	160	6,400
Mariposa	354	8,850	9,765	126,945		
Mendocino	120	3,600	16,227	243,405		
Merced	810	21,800	37,250	556,500	75	3,750
Modoc	276	8,280	35,891	611,248	41	1,250
Mono	523	10,460	3,404	51,075		
Monterey	420	12,600	8,556	128,340		
Napa	550	22,000	7,200	144,000	205	16,400
Nevada	33	560	3,150	37,700		
Orange	420	6,300	6,110	61,100		
Placer	73	1,460	2,140	33,940		
Plumas	120	3,260	3,236	48,543		
Riverside			4,557	45,570	37	1,480
Sacramento	400	8,000	4,000	60,000	200	7,000
San Benito			16,537	248,060		
San Bernardino	480	12,000	8,730	61,110	92	2,760
San Diego	800	16,000	27,000	324,000		
San Francisco		48,900				61,540
San Joaquin	210	6,300	15,372	230,580	182	9,100
San Luis Obispo		3,150	34,733	520,990		6,400
San Mateo	58	2,180	2,860	56,750		
Santa Barbara			18,470	266,895		
Santa Clara	805	24,150	8,700	139,200	259	12,950
Santa Cruz		15,070				
Shasta	228	5,615	15,375	230,205		
Sierra			1,239	19,130		
Siskiyou	972	24,300	22,577	338,655	10	500
Solano		16,750		117,150		1,600
Sonoma	580	17,400	10,210	204,200	500	25,000
Stanislaus	157	3,925	16,892	261,500		
Sutter	32	610	5,236	78,390	2	80
Tehama	93	2,790	25,890	453,075	233	11,770
Trinity	55	1,650	7,197	107,955	2	100
Tulare	539	13,530	33,495	558,570		
Tuolumne			3,500	52,500	2	100
Ventura			12,248	97,978		
Yolo	348	10,390	8,073	121,500	166	7,990
Yuba	120	2,400	6,100	73,200		
Totals		\$654,435		\$10,710,567		\$346,325

SCHEDULE G—Continued.

Showing Kinds of Personal Property Assessed, and the Assessed Value,
for 1904.

Counties.	Cows—American.		Cows—Graded.		Cows—Common.		Calves.	
	Number	Value.	Number	Value.	Number	Value.	Number	Value.
Alameda	6,500	\$130,000	600	\$15,000	3,500	\$52,500	5,000	\$25,000
Alpine					249	4,980	445	3,115
Amador	31	620			2,564	51,280	751	3,755
Butte			1,020	25,500	1,015	20,300	1,670	13,360
Calaveras	10	300			1,500	30,000	4,000	20,000
Colusa					1,875	55,165	5,234	56,619
Contra Costa	5,210	130,250					1,703	17,030
Del Norte			11	390	2,920	58,600	880	7,040
El Dorado					2,750	68,750	3,250	32,500
Fresno	71	4,765			23,480	536,097	11,548	80,834
Glenn					1,090	32,695	4,847	48,476
Humboldt	240	6,000			17,897	375,840	10,791	53,955
Inyo	1,360	34,000	143	3,575			4,160	24,960
Kern	1,700	34,000					7,000	35,000
Kings	5,993	149,400					5,604	35,720
Lake	136	3,400			1,976	49,380	3,033	28,738
Lassen					3,060	73,440	18,325	175,725
Los Angeles		357,420						183,450
Madera	925	20,350					5,750	35,750
Marin	450	11,250	19,750	395,000	3,450	31,285	3,985	19,925
Mariposa	115	2,300					1,991	9,955
Mendocino					6,124	122,480	6,165	30,825
Merced			4,100	101,000			7,300	43,800
Modoc			595	17,840			11,117	111,170
Mono					267	6,675	500	2,500
Monterey			7,465	186,625			8,040	64,320
Napa	6,550	163,750					4,450	44,500
Nevada			190	4,750	1,469	29,380	1,193	5,965
Orange	2,080	52,000			4,416	88,320	2,705	18,935
Placer			496	14,880	2,370	59,250	1,590	12,720
Plumas					2,340	46,800	2,803	28,035
Riverside	441	8,820	107	1,819	2,986	59,720	2,006	10,030
Sacramento	7,000	175,000					3,000	15,000
San Benito			2,600	65,000			7,555	60,440
San Bernardino			2,325	46,500			960	1,920
San Diego	750	18,750			12,500	250,000	4,500	22,500
San Francisco								
San Joaquin					9,354	196,430	7,423	37,115
San Luis Obispo	17,547	298,300						50,010
San Mateo			3,582	106,450	6,840	168,950	1,283	8,760
Santa Barbara					5,480	99,730	1,585	8,010
Santa Clara	6,121	183,600					3,391	27,128
Santa Cruz			1,475	17,415	4,220	105,495	315	1,575
Shasta			1,258	25,885	1,528	32,690	4,673	24,615
Sierra	734	18,375					153	1,555
Siskiyou	100	2,500	3,618	72,360			5,955	59,550
Solano		195,655						15,150
Sonoma	20,640	412,800			520	7,800	5,620	56,200
Stanislaus	6,779	169,250					8,537	59,210
Sutter	5	150			2,403	70,545	2,591	25,775
Tehama					1,339	35,595		
Trinity					267	6,675	734	3,670
Tulare					7,178	187,000	9,673	61,045
Tuolumne					400	8,000	500	2,500
Ventura	2,323	34,846					2,976	8,929
Yolo					5,081	150,590	2,900	28,995
Yuba					1,800	36,000	600	4,800
Totals		\$2,617,851		\$1,099,789		\$3,208,437		\$1,888,159

SCHEDULE G—Continued.

Showing Kinds of Personal Property Assessed, and the Assessed Value,
for 1904.

Counties.	Oxen.		Hogs.		Mules.		Jacks and Jennies.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
Alameda	4	\$200	3,800	\$15,200	400	\$20,000	10	\$100
Alpine			73	165	3	30		
Amador	24	720	3,162	7,905	281	8,430		
Butte			2,670	4,505	1,945	77,800	18	900
Calaveras	20	400		4,000	150	7,500	20	100
Colusa	4	100	13,518	38,690	4,035	180,310	56	5,135
Contra Costa			3,472	17,350	471	23,550	3	525
Del Norte			680	1,570	21	735		
El Dorado			890	3,560	20	400	5	50
Fresno			11,950	35,848	1,765	51,425	47	1,625
Glenn			13,091	39,272	3,661	183,060		3,170
Humboldt			5,284	13,889	341	10,315	5	180
Inyo			950	2,850	180	4,500	5	300
Kern				15,000	1,200	46,000	130	2,000
Kings			15,497	29,429	359	11,850	50	1,985
Lake			5,433	13,996	271	10,875	22	480
Lassen			1,965	5,895	103	5,150	34	3,400
Los Angeles				53,780		132,675		1,845
Madera			5,500	13,750	2,150	73,315	31	2,015
Marin	12	360	8,400	25,200	14	320		
Mariposa			2,395	4,790	187	5,610	25	275
Mendocino	25	625	9,494	23,250	150	4,950	6	300
Merced			12,430	37,290	3,495	115,985	160	4,960
Modoc	18	400	2,823	6,765	580	11,605	78	4,920
Mono			227	480	32	715	2	100
Monterey	10	180	4,020	8,040	120	2,400	24	360
Napa					350	14,000		1,500
Nevada	7	140	280	1,400	44	795		
Orange			2,140	6,420	560	22,400		
Placer			740	2,220	539	16,170	73	1,460
Plumas	10	150	458	1,780	16	370		
Riverside	10	190	1,780	7,120	391	9,775	22	660
Sacramento			5,000	15,000	450	11,250	50	3,750
San Benito			3,030	9,100	39	1,560	3	25
San Bernardino			120	360	285	7,550	4	30
San Diego			6,500	20,000			25	500
San Francisco				5,500				
San Joaquin				27,169	5,381	139,910		915
San Luis Obispo			8,620	25,860	375	11,240	6	240
San Mateo			1,462	4,685	38	1,540		
Santa Barbara			3,720	23,135	1,340	52,790	9	405
Santa Clara			3,713	14,855	132	5,940	32	320
Santa Cruz	80	2,000	1,150	5,665	1,215	3,525		
Shasta	5	100	6,622	15,500	397	9,860	21	255
Sierra	8	200			25	570	1	50
Siskiyou			3,078	7,695	343	10,290	7	700
Solano				5,550		65,000		1,700
Sonoma	50	750	2,750	8,250	470	11,700	16	320
Stanislaus			8,360	20,990	4,842	168,950	48	3,065
Sutter			8,368	23,046	2,269	113,255	16	1,245
Tehama			8,147	24,440	1,355	64,130	15	2,650
Trinity	8	140	925	2,332	190	5,630	13	250
Tulare			20,921	55,160	1,806	66,640	15	1,940
Tuolumne			250	750	40	1,600	10	80
Ventura			3,845	7,690	678	21,710		
Yolo			11,390	40,740	3,422	165,850	37	4,760
Yuba	20	1,000	2,900	9,600	1,057	23,340	21	600
Totals		\$7,655		\$814,481		\$2,016,845		\$62,145

SCHEDULE G—Continued.

Showing Kinds of Personal Property Assessed, and the Assessed Value,
for 1904.

Counties.	Horses— Thoroughb'd		Horses— Standard Bred.		Horses— American.		Horses— Common.		Colts.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Alameda	600	\$120,000	3000	\$90,000	3000	\$60,000	1000	\$15,000	250	\$2,500
Alpine					76	3,070	147	2,965	43	955
Amador					3042	76,050			297	3,712
Butte			175	17,500	2840	84,320			720	14,400
Calaveras	6	1,200	10	750	20	1,000	2000	40,000	500	5,000
Colusa							3314	106,315	824	17,530
Contra Costa	3	1,500	225	38,750	4904	220,80			115	1,380
Del Norte							479	16,975	62	1,095
El Dorado	15	1,500	10	500	30	1,050	1680	50,400	210	3,150
Fresno	27	4,380			46	2,645	10965	294,203	1426	28,350
Glenn							2362	70,846	686	10,285
Humboldt	8	4,000	650	42,325	5312	153,078			768	16,695
Inyo			21	2,100	1625	48,750	1875	28,125	200	2,000
Kern					1500	60,000	5000	120,000	1500	15,000
Kings	8	1,100			4109	104,736			889	13,620
Lake	12	740					2508	98,642	470	10,310
Lassen			46	4,900	2655	132,750	4243	84,860	480	4,800
Los Angeles	832	187,320					27241	953,435	1700	17,000
Madera							5310	72,860	390	4,875
Marin			30	3,000	685	47,950	1145	28,625	72	1,440
Mariposa	2	200					1785	35,700	255	2,550
Mendocino			20	3,000			4804	175,790	716	14,320
Merced			110	8,925	4940	123,500	965	19,300	1084	11,382
Modoc			51	6,580	2290	95,339	5408	86,536	1221	12,210
Mono					386	11,815	618	6,180	134	1,345
Monterey	6	1,500	110	11,000	1240	37,200	7218	180,450	192	1,920
Napa	165	41,250			4350	174,000		126,000	1250	24,100
Nevada					246	1,285	1527	36,485	108	1,230
Orange	14	2,800	22	5,500	1560	62,400	3210	80,250	1750	21,875
Placer			9	1,845	391	15,640	2883	86,900	521	9,700
Plumas							1182	35,825	240	4,800
Riverside	28	2,240	213	3,405	5111	116,275			540	6,480
Sacramento	400	120,000	300	18,000	6100	152,500			2260	85,000
San Benito			28	4,950	3492	127,215			1579	20,525
S. Bernardino	55	4,025	110	8,250	2180	44,690	1430	21,450	210	1,050
San Diego			20	2,000	1200	48,000	5200	78,000	600	6,000
San Francisco		11,000		385,765						
San Joaquin					11794	294,860	4617	83,110	3794	37,945
S. Luis Obispo		1,975			1244	43,545	6658	159,780	1219	21,952
San Mateo	1	2,500	5	2,250	285	28,500	2462	112,680	162	3,875
Santa Barbara			23	1,860	1715	72,280	3485	87,810	342	5,520
Santa Clara	97	21,825	249	31,125	8340	417,000	3570	71,400	1497	22,455
Santa Cruz			10	1,760	3210	86,390	1185	23,695	210	3,565
Shasta	4	400	74	4,490	1990	59,260	1975	38,620	544	5,220
Sierra					489	16,190			43	780
Siskiyou	10	1,000	2000	80,000	4658	102,475	500	5,000	620	6,200
Solano				4,950		16,500		230,750		13,000
Sonoma	50	7,500	45	4,500	7350	294,000	5150	128,750	1840	27,600
Stanislaus			30	2,590	1761	51,725	4113	92,225	1933	32,340
Sutter	16	1,535	140	5,450	1993	71,625	888	27,490	969	20,765
Tehama	18	2,500			967	44,215	3182	82,690	581	10,185
Trinity			2	200	79	3,950	872	20,915	55	655
Tulare			21	3,225	1189	59,270	6054	161,275	2058	30,340
Tuolumne					200	10,000	1000	25,000	200	2,000
Ventura					1879	75,165	4866	87,610	1016	12,196
Yolo	48	5,300	350	17,140			4227	125,695	1144	20,175
Yuba	5	700			13	1,300	3720	83,150	300	3,000
Totals		\$549,990		\$818,585		\$3,754,188		\$4,599,762		\$677,952

SCHEDULE G—Continued.

Showing Kinds of Personal Property Assessed, and the Assessed Value,
for 1904.

Counties.	Sheep— Imported or Fine and Graded.		Sheep— Common.		Lambs.		Goats— Angora		Goats— Common.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Alameda	550	\$1,600	4000	\$8,000	1500	\$1,500	20	\$40	175	\$175
Alpine			16	32	6	5			1	2
Amador			5748	8,622					2620	2,620
Butte			37000	92,500			560	1,680	820	1,640
Calaveras			18000	36,000	10000	5,000			1000	1,000
Colusa			41142	85,633	4698	4,705			2670	4,100
Contra Costa	4100	12,300	3860	7,720	2500	3,750			100	200
Del Norte			1481	2,220					60	120
El Dorado			5000	10,000					1100	1,100
Fresno	477	3,580	98866	197,733	51116	30,058	93	275	837	1,678
Glenn	265	1,205	97504	195,018	8080	16,160				
Humboldt	443	1,840	71076	106,856					1400	2,195
Inyo			14000	35,000					3000	4,500
Kern			143000	220,300	47000	23,500				
Kings	1700	5,100	52274	104,990	8708	4,403			86	100
Lake			7593	15,258					6336	12,612
Lassen	161	805	38670	105,925						
Los Angeles			50110	87,690	9220	10,150				565
Madera			32200	64,400	14000	7,000			100	200
Marin			475	950	220	220				
Mariposa			15318	30,636	5050	3,786			675	675
Mendocino			92239	184,478					2951	5,902
Merced	700	3,500	106350	213,100	56700	28,350			1200	1,200
Modoc	290	1,415	28944	86,832	15320	30,640			376	1,043
Mono			130	327					172	206
Monterey			12200	24,400	500	500	400	1,600	1200	2,400
Napa			4250	10,625		1,150				200
Nevada			6765	13,530					225	225
Orange			39750	79,500	10500	5,250				
Placer	405	2,025	23100	46,200	2800	2,800			573	575
Plumas			285	570						
Riverside			10675	21,350					80	160
Sacramento			18000	45,000	7000	3,500			100	100
San Benito			14685	29,370	2495	2,495			635	1,270
San Ber'dino			250	500						
San Diego			4000	8,000	250	125			900	900
San Francisco		3,200								
San Joaquin			23157	46,314	2550	1,275			140	140
San L. Obispo	2144	5,360	2773	2,506	175	350			2866	5,732
San Mateo			312	780						
Santa B'bara			51865	103,730						
Santa Clara	1750	5,250			270	540	90	450	270	270
Santa Cruz	125	380	702	1,505			700	1,050	300	370
Shasta			18191	36,395	128	122			9979	15,180
Sierra									60	60
Siskiyou			12190	24,380					150	225
Solano		7,500		46,700		2,000				
Sonoma	1530	5,600	25450	50,900	2400	1,200	820	1,640	1200	1,000
Stanislaus	20	75	46831	94,685	19746	10,880			92	240
Sutter			51213	104,505	7982	4,483			22	50
Tehama	1779	8,895	235070	470,140					15280	26,740
Trinity			5125	10,250	20	10			350	700
Tulare			55480	132,880	17935	18,165			1060	2,055
Tuolumne			6000	15,000	1000	1,000			200	200
Ventura			8862	15,510					1150	1,725
Yolo	1400	7,000	39026	78,365	2250	3,405			396	615
Yuba			30000	60,000					350	400
Totals		\$76,625		\$3,463,810		\$218,477		\$6,735		\$104,185

SCHEDULE G—Continued.

Showing Kinds of Personal Property Assessed, and the Assessed Value, for 1904.

Counties.	Poultry.		Traction Engine.	Farming Utensils.	Wagons and other Vehicles.	Automobiles.	Machinery.
	Dozen.	Value.	Value.	Value.	Value.	Value.	Value.
Alameda	10,000	\$30,000	\$6,000	\$180,000	\$210,000	\$5,200	\$310,000
Alpine	77	231		2,396	3,180		9,520
Amador	52	156	2,500	12,760	69,025		10,500
Butte	1,210	3,630	16,000	25,025	67,420	2,500	825,350
Calaveras	1,000	2,500	1,000	8,000	32,000		100,000
Colusa	2,054	6,615	8 200	28,545	50,175	500	99,900
Contra Costa	4,320	10,800	3,000	41,165	56,140		976,325
Del Norte	200	600		2,025	8,385	300	28,675
El Dorado	1,035	5,175	11,000	9,025	38,350		54,800
Fresno	6,605	13,210	72,995	42,851	175,850	13,000	288,890
Glenn	2,100	4,200	2,275	11,215	25,970	1,800	52,625
Humboldt	2,237	5,575	15,150	19,250	76,920	4,690	187,280
Inyo	568	1,704		15,600	24,825		20,500
Kern		6,000		21,000	75,000	4,000	600,000
Kings	415	904		10,900	44,140	2,350	63,260
Lake	2,098	6,062	475	12,385	44,590		22,355
Lassen	2,784	5,568		10,372	34,145		29,748
Los Angeles		43,240		73,945	723,875	549,250	2,280,510
Madera	1,110	2,775		13 350	30,430	1,000	107,100
Marin		10,235	1,000	4,575	29,215	1,000	55,500
Mariposa	547	1,367		2,015	10,950		24,580
Mendocino	1,000	2,500		18,500	90,000	250	255,000
Merced	3,385	8,462	4,500	22,788	61,975	3,000	59,750
Modoc	923	1,846	4,460	10,094	46,105		42,975
Mono	156	780		1,815	9,520		2,980
Monterey	3,100	9,300		56,560	55,800	6,840	87,260
Napa		9,500		19,500	92,550	3,650	85,650
Nevada		1,190	2,850	10,615	43,430	200	25,735
Orange	12,680	31,700	1,600	44,390	75,015	10,000	122,040
Placer	1,400	4,200	6,300	21,200	27,350	3,700	73,200
Plumas				10,053	20,450		7,085
Riverside	2,020	3,030	300	13,935	63,500	10,565	50,340
Sacramento	9,000	27,000	6,000		90,000	6,000	320,000
San Benito	5,840	14,600		12,905	38,560	450	49,885
San Bernardino	725	1,450	6,300	21,260	43,225		282,620
San Diego	1,000	3,000		35,500	85,000	11,500	90,000
San Francisco		3,850			527,980	63,000	3,355,600
San Joaquin	3,435	10,305	6,000	43,720	169,915	15,000	224,310
San Luis Obispo	10,770	23,125		32,310	90,100	2,000	71,665
San Mateo		1,690	350	11,680	49,765	3,750	113,580
Santa Barbara	4,280	8,560		19,840	193,290	5,400	115,090
Santa Clara	20,175	60,525	2,000	53,305	240,100	16,400	190,130
Santa Cruz	3,200	8,000		9,375	86,600	2,900	186,890
Shasta	1,377	3,504	13,500	9,890	64,675		149,737
Sierra				2,435	9,185		3,100
Siskiyou	700	1,400	30,000	25,000	27,000		210,000
Solano		3,850		29,650	125,750	1,500	150,150
Sonoma	9,150	27,450	900	47,970	145,980	3,750	102,760
Stanislaus	1,901	5,080	500	23,900	71,465	3,500	57,835
Sutter	2,967	8,680		17,885	41,380		39,900
Tehama	1,732	4,330	2,800	14,845	58,480		75,080
Trinity	400	2,000	955	2,050	13,175		19,915
Tulare	1,300	3,705	140	45,460	83,550	2,400	94,265
Tuolumne	700	3,500	9,500		10,500		332,000
Ventura	1,821	1,821		27,830	45,115	1,800	281,510
Yolo	2,518	6,300	2,000	32,310	67,690		74,674
Yuba	450	900	500	26,200	50,200	2 100	175,050
Totals		\$467,680	\$241,050	\$1,321,169	\$4,844,960	\$745,245	\$13,725,259

SCHEDULE G—Continued.

*Showing Kinds of Personal Property Assessed, and the Assessed Value,
for 1904.*

Counties.	Oil Tanks, Pumps, etc.	Hay.	Wool.	Wood.	Coal.	Lumber.
	Value.	Value.	Value.	Value.	Value.	Value.
Alameda	\$121,000	\$100,000	\$1,000	\$6,000	\$300,000	\$210,000
Alpine	-----	1,300	-----	820	-----	300
Amador	1,510	2,650	-----	4,000	-----	8,880
Butte	-----	3,150	-----	3,045	-----	90,500
Calaveras	700	1,000	-----	2,000	250	15,000
Colusa	1,600	960	640	2,570	-----	5,800
Contra Costa	301,885	27,720	-----	2,420	13,200	150,500
Del Norte	-----	-----	-----	-----	-----	52,000
El Dorado	-----	720	-----	600	-----	46,235
Fresno	139,960	10,150	7,380	7,900	600	136,350
Glenn	6,375	735	1,915	4,650	-----	6,470
Humboldt	-----	1,270	725	4,700	-----	175,200
Inyo	-----	4,000	-----	-----	-----	1,000
Kern	600,000	-----	-----	-----	4,500	50,000
Kings	-----	1,240	-----	7,700	-----	11,830
Lake	-----	1,035	200	280	-----	2,265
Lassen	-----	2,535	-----	-----	-----	-----
Los Angeles	843,545	169,450	26,235	9,370	168,450	1,828,635
Madera	-----	5,000	-----	-----	-----	8,200
Marin	-----	6,240	-----	1,500	-----	3,500
Mariposa	-----	2,610	-----	6,135	-----	5,800
Mendocino	1,000	2,500	-----	7,000	-----	106,950
Merced	1,500	9,200	-----	400	300	-----
Modoc	-----	1,820	-----	-----	-----	2,240
Mono	-----	3,040	-----	2,395	-----	1,470
Monterey	21,000	18,720	55	2,800	880	31,780
Napa	44,500	7,650	1,650	2,750	1,500	28,900
Nevada	250	335	-----	2,600	28,150	50,400
Orange	37,455	10,500	-----	12,600	-----	15,680
Placer	3,750	1,040	-----	1,750	10,000	28,600
Plumas	-----	1,195	-----	-----	-----	1,765
Riverside	-----	7,650	-----	905	120	14,160
Sacramento	20,000	10,000	-----	16,000	18,000	90,000
San Benito	1,195	91,125	-----	1,595	-----	8,220
San Bernardino	15,000	1,920	-----	640	1,150	40,950
San Diego	-----	16,000	-----	500	1,200	83,290
San Francisco	-----	48,650	37,000	9,010	230,660	515,930
San Joaquin	19,800	14,300	4,780	4,975	5,295	140,740
San Luis Obispo	14,050	2,615	160	2,235	5,000	60,715
San Mateo	8,000	1,650	-----	-----	7,840	9,840
Santa Barbara	124,270	-----	-----	-----	-----	52,150
Santa Clara	22,045	11,800	-----	20,400	14,400	56,320
Santa Cruz	-----	3,850	-----	33,490	-----	68,015
Shasta	-----	955	30	3,480	26,520	23,950
Sierra	-----	1,485	-----	-----	-----	18,360
Siskiyou	2,000	3,000	-----	20,000	-----	110,000
Solano	5,250	2,850	-----	3,000	3,050	47,250
Sonoma	400	1,900	385	6,000	335	10,000
Stanislaus	-----	4,050	-----	1,165	50	31,200
Sutter	-----	55	80	315	-----	7,150
Tehama	-----	750	-----	510	-----	40,815
Trinity	-----	1,340	-----	3,130	-----	1,445
Tulare	-----	2,650	-----	16,105	-----	18,275
Tuolumne	1,000	-----	-----	-----	-----	123,000
Ventura	-----	3,495	850	2,575	-----	32,850
Yolo	-----	3,190	-----	5,345	-----	16,300
Yuba	2,500	1,000	1,960	4,000	120	5,500
Totals	\$2,361,530	\$634,045	\$85,045	\$251,360	\$841,570	\$4,717,675

SCHEDULE G—Continued.

Showing Kinds of Personal Property Assessed, and the Assessed Value,
for 1904.

Counties.	Typewriters.	Bicycles or Tricycles.	Firearms.	Libraries— Law, Medi- cal, etc.	Pianos.	Musical In- struments.
	Value.	Value.	Value.	Value.	Value.	Value.
Alameda	\$10,000	\$125,000	\$3,000	\$10,000	\$340,000	\$40,000
Alpine	20		255	195	200	210
Amador	105			2,775	29,400	2,790
Butte	2,300	16,600	1,320	7,010	39,200	12,050
Calaveras	500	100	2,000	3,000	20,000	500
Colusa	290	445	3,105	3,760	24,180	1,330
Contra Costa	600	1,000	6,150	5,350	19,150	2,725
Del Norte	40	220	460	1,600	4,600	1,900
El Dorado	220	70	905	2,170	15,000	4,125
Fresno	3,970	10,120	5,785	13,715	91,180	3,155
Glenn	150		895	2,750	9,935	
Humboldt	830	105	1,665	11,270	67,420	10,535
Inyo	420	350	1,275	2,000	6,000	2,630
Kern	2,500	2,800	8,000		25,000	
Kings	710	1,611	560	2,725	26,485	2,400
Lake	240	440	3,145	1,370	11,295	3,375
Lassen				1,600	27,245	5,125
Los Angeles	36,050	68,920	8,765	23,175	643,230	42,610
Madera	450	1,215	1,300	500		11,910
Marin	985	1,230	215	2,700	27,600	560
Mariposa	250		555	850	7,800	3,495
Mendocino	1,500	600	5,200	8,250	3,500	10,250
Merced	985	1,230	2,185	4,250	21,225	3,280
Modoc	225	400	2,575	2,405	14,905	4,950
Mono	255	55	840	1,435	3,885	1,450
Monterey	760	1,870	490	2,120	24,800	350
Napa	450	20,600	6,250	14,250	34,500	10,300
Nevada	745	110	230	4,380	37,460	7,940
Orange	1,950	28,975	4,950	5,260	34,500	11,460
Placer	3,120	1,470	1,610	3,940	43,080	6,850
Plumas	215			1,225	4,860	2,455
Riverside	1,245	3,695	1,210	3,915	56,730	3,120
Sacramento	5,000	30,000	2,500	10,000	90,000	8,000
San Benito	600	640	400	1,695	12,360	775
San Bernardino	2,200	15,600	860	4,300	26,875	1,525
San Diego	3,500	16,500	2,500	16,000	100,000	12,500
San Francisco	56,065	90,080	27,400	293,590	522,080	28,640
San Joaquin	3,410	7,240	5,120	18,120	44,725	10,135
San Luis Obispo	965	2,660	2,925	6,355	37,300	
San Mateo	160	640	780	13,780	18,750	1,860
Santa Barbara	2,515	3,565	3,820	10,540		37,460
Santa Clara	22,080	94,500	9,040	36,500	190,100	7,040
Santa Cruz	765	4,260	560	3,750	48,645	
Shasta	955	520	2,575	6,075	25,115	7,875
Sierra	225		300	800	4,450	1,590
Siskiyou	500	400	600	4,500	7,000	5,500
Solano	450	1,300	1,550	4,200		72,200
Sonoma	6,250	24,800	5,450	24,350	140,500	2,340
Stanislaus	630	1,710	2,400	4,785	35,385	3,690
Sutter	165	495	2,445	635	14,500	1,425
Tehama	955	1,460	2,915	3,210	37,060	
Trinity	340	230	1,100	1,505	4,975	1,220
Tulare	1,875	4,075	1,520	7,575	53,700	6,665
Tuolumne	1,500	300	250	3,000	22,500	200
Ventura	923	465	770	3,600	24,860	3,425
Yolo			1,345	4,430		30,840
Yuba	500	1,100	400	4,000	18,700	2,500
Totals	\$184,608	\$591,771	\$154,420	\$627,240	\$3,191,945	\$461,235

SCHEDULE G—Continued.

Showing Kinds of Personal Property Assessed, and the Assessed Value,
for 1904.

Counties.	Sewing Machines.	Furniture.	Steamers, Vessels, or Watercraft.	Harness, Robes, Saddles, etc.	Goods, Wares, and Merchandise	Consigned Goods.
	Value.	Value.	Value.	Value.	Value.	Value.
Alameda	\$30,000	\$2,100,000	\$338,000	\$8,000	\$1,358,644	\$6,000
Alpine	182	1,840		1,160	4,230	
Amador	6,960	58,275			115,365	
Butte	10,100	152,600		18,050	490,125	500
Calaveras	10,000	100,000		6,000	90,180	
Colusa	6,468	70,045	750	21,750	154,850	
Contra Costa	10,675	135,350	126,595	10,150	304,250	
Del Norte	1,630	14,660	600	1,930	24,390	
El Dorado	6,335	64,210		6,780	85,610	
Fresno	42,797	313,400		49,815	505,609	9,015
Glenn	2,495	41,710		9,995	120,665	
Humboldt	17,570	176,305	91,290	22,475	537,250	
Inyo	2,650	23,465		9,875	75,000	
Kern	8,000	130,000		20,000	375,000	
Kings	5,520	57,900		10,365	157,725	1,975
Lake	5,166	56,325	7,560	10,985	62,820	
Lassen	8,430	9,680		9,720	99,500	
Los Angeles	83,425	5,482,140	265,250	92,480	7,841,275	253,760
Madera	3,650	37,260		13,115	91,535	
Marin	2,170	161,030	175,900	3,475	79,430	
Mariposa	1,780	15,200		5,300	62,330	
Mendocino	17,240	150,150	650	20,275	315,260	
Merced	5,665	63,350		23,660	145,370	
Modoc	4,900	37,795		18,860	137,240	50
Mono	1,180	15,385		3,175	37,030	
Monterey	11,150	169,270	1,200	44,795	322,260	
Napa	15,200	201,200	1,500	15,500	290,500	
Nevada	7,765	137,835		6,055	214,460	100
Orange	18,810	166,245		28,640	218,145	
Placer	1,250	30,000	18,150	15,650	149,800	
Plumas	2,500	23,765		5,425	79,140	6,000
Riverside	9,635	182,495		17,405	240,420	
Sacramento	20,000	419,000	12,000	75,000	2,000,970	55,000
San Benito	6,395	43,430		12,225	85,665	
San Bernardino	2,300	155,520	1,500	6,320	463,640	
San Diego	17,500	380,000	32,000	12,500	565,400	7,500
San Francisco	103,220	6,978,735	7,309,400	93,280	18,730,160	271,345
San Joaquin	14,820	322,525	27,360	36,505	668,920	7,220
San Luis Obispo	13,505	118,965	750	29,840	192,600	
San Mateo	1,865	226,580	2,900	15,960	156,940	
Santa Barbara	2,870	205,120		12,340	472,755	
Santa Clara	62,400	819,500	2,470	70,300	1,576,035	5,200
Santa Cruz	9,035	173,960	1,830	15,145	282,620	
Shasta	7,470	104,605		14,170	333,120	
Sierra	1,070	23,845		1,310	48,080	
Siskiyou	5,000	70,100		26,100	212,390	
Solano	17,550	280,900	78,590	30,000	450,400	
Sonoma	19,440	352,475		24,450	835,390	1,100
Stanislaus	8,850	101,660		26,860	192,540	
Sutter	4,305	38,380	350	14,475	39,555	100
Tehama	9,860	103,115		18,025	236,405	
Trinity	2,760	22,885		3,785	56,675	
Tulare	13,940	126,070		22,885	173,515	
Tuolumne	3,000	10,000		1,000	200,000	
Ventura	5,410	78,240		15,815	178,495	
Yolo	8,020	116,820		23,240	243,010	
Yuba	2,500	75,000	600	9,460	384,150	
Totals	\$724,583	\$21,726,315	\$8,497,195	\$1,141,850	\$43,558,838	\$624,865

SCHEDULE G—Continued.

Showing Kinds of Personal Property Assessed, and the Assessed Value,
for 1904.

Counties.	Pipe.		Presses.		
	Vitrified and Iron.	Gas and Water	Printing.	Wine.	Hay.
	Value.	Value.	Value.	Value.	Value.
Alameda	\$77,000	\$2,800,000	\$50,000	\$2,500	\$1,000
Alpine					
Amador		1,485	2,600		800
Butte	8,500	31,890	2,700		2,850
Calaveras	6,000		4,000	100	1,000
Colusa		6,000	2,550		100
Contra Costa		45,695	16,000	3,900	8,100
Del Norte			950		
El Dorado	5,280	905	1,960	200	700
Fresno		5,545	5,375	5,020	755
Glenn			3,100		
Humboldt	900	18,600	12,700		140
Inyo			1,500	1,500	
Kern					2,000
Kings		6,000	2,940		
Lake			975	30	455
Lassen			1,600		
Los Angeles	49,750	314,800	424,565	2,230	3,765
Madera		9,000	1,085	50	100
Marin			3,400		
Mariposa			980		
Mendocino	16,500		7,500		2,500
Merced			1,835		625
Modoc			1,300		150
Mono		4,075	690		250
Monterey	15,000	15,000	2,560	200	700
Napa			11,500	10,000	12,000
Nevada	36,000		9,400	15	170
Orange	11,660		5,400	500	1,000
Placer	15,000	29,800	3,200	75	750
Plumas	1,825		3,710		
Riverside	4,200		3,575		1,875
Sacramento		30,000	28,500		
San Benito			3,850		
San Bernardino			12,550		500
San Diego		150,000	15,000	400	1,000
San Francisco		4,540,000	552,070		
San Joaquin		124,550	14,120	935	7,340
San Luis Obispo		15,700	2,750		1,690
San Mateo		1,039,445	3,100		
Santa Barbara					
Santa Clara	3,250	9,325	14,100	2,500	3,400
Santa Cruz	6,170	50,640	9,465		
Shasta		100	3,150	30	985
Sierra			940		
Siskiyou			26,450		
Solano					
Sonoma	26,180		7,210	4,840	9,100
Stanislaus		100	5,350		100
Sutter		400	2,100		100
Tehama			6,100	450	
Trinity	10,090		225	5	710
Tulare	70,467		7,650	200	
Tuolumne	7,600		1,200	30	150
Ventura		108,747	1,325		1,020
Yolo			10,000		1,500
Yuba	700		5,800	150	450
Totals	\$372,072	\$9,357,802	\$1,322,695	\$35,830	\$69,830

SCHEDULE G—Continued.

Showing Kinds of Personal Property Assessed, and the Assessed Value, for 1904.

Counties.	Electric Light Plants, Dynamoes, etc.	Fixtures of Stores, Saloons, and Other Business Places.	Franchises Not Assessed by State Board of Equalization.	Railroad Rolling Stock Not Assessed by State Board of Equaliza- tion.
	Value.	Value.	Value.	Value.
Alameda	\$550,000	\$230,000	\$5,099,600	\$320,000
Alpine	600	170		
Amador		9,320		
Butte	83,125	36,790	5,250	
Calaveras	40,000	20,000	1,500	
Colusa	5,380	18,535	5,100	
Contra Costa	19,150	41,560	148,150	2,000
Del Norte	2,800	2,490		
El Dorado	25,000	8,850	16,050	
Fresno	9,750	98,780	5,000	
Glenn		14,295	17,000	
Humboldt	44,680	52,385	65,180	46,330
Inyo	10,000	3,500		
Kern	45,600	35,000	40,000	34,000
Kings		25,485	5,500	
Lake	250	7,330		
Lassen	3,800	9,775		
Los Angeles	2,655,565	783,215	4,845,725	766,835
Madera	19,500	9,140	4,000	
Marin	81,200	4,830		
Mariposa	17,000	2,400		
Mendocino	41,775	5,750		115,256
Merced	16,520	19,760	26,750	2,700
Modoc	500	5,115	50	
Mono	21,000	2,175	3,950	32,665
Monterey	32,750	8,000	28,000	9,000
Napa	12,000	23,750	500	
Nevada	4,200	27,315	4,550	9,050
Orange	21,085	22,290	1,000	
Placer	20,200		2,450	18,650
Plumas	1,500	4,785		
Riverside	6,380	30,215		17,100
Sacramento	120,000	140,000	200,000	55,000
San Benito		23,230	1,000	
San Bernardino	220,730			86,650
San Diego	40,000	50,000	50,000	33,830
San Francisco	4,496,845	1,385,195	28,985,718	4,196,710
San Joaquin	9,000	42,856	144,675	
San Luis Obispo	5,300	46,350	6,800	
San Mateo	36,750	9,860	19,100	180,700
Santa Barbara	27,550	12,905		
Santa Clara	18,300	70,400		1,200
Santa Cruz	14,535	33,510	9,825	8,560
Shasta	62,120	47,355	14,750	30,300
Sierra	1,750	1,450	2,000	
Siskiyou	42,750	6,750		
Solano	63,700	34,250	7,500	
Sonoma	33,000	50,280	6,600	
Stanislaus	23,000	27,670	1,000	900
Sutter	1,175	3,995	1,000	
Tehama	250	30,840		3,000
Trinity	3,810	2,390	175	
Tulare	45,600	36,705		
Tuolumne	69,000	6,000		
Ventura	14,150	30,890	9,500	
Yolo		33,105		
Yuba		3,000	1,400	3,770
Totals	\$9,140,625	\$3,692,086	\$39,786,348	\$5,974,210

SCHEDULE G—Continued.

*Showing the Kinds of Personal Property Assessed, and the Assessed Value,
for 1904.*

GRAIN ASSESSED IN STORAGE.

Counties.	Wheat.	Oats.	Barley.	Corn.	Other Personal Property, Not in Schedule.
	Value.	Value.	Value.	Value.	Value.
Alameda	\$25,000	\$5,000	\$50,000	\$1,500	\$78,000
Alpine	80	85			1,115
Amador					10,835
Butte	30,450		12,300		60,065
Calaveras			150		72,000
Colusa	200,960	420	93,345	1,435	54,820
Contra Costa	116,645		113,740		49,205
Del Norte					
El Dorado					21,000
Fresno	24,095	150	10,645	335	672,230
Glenn	172,430		16,785	1,370	33,500
Humboldt		535	40		125,640
Inyo	2,000				18,280
Kern	12,000				1,249,075
Kings	2,415		2,600	820	157,910
Lake	680	50	1,695	15	14,555
Lassen	120				
Los Angeles	73,415	575	52,420	3,250	1,430,800
Madera	62,730		33,600		40,550
Marin					35,060
Mariposa			1,920		5,670
Mendocino		150			58,525
Merced	94,320	4,830	48,585	6,000	203,300
Modoc	950		1,615		15,100
Mono			645		42,610
Monterey	220,140	70,080	130,280	960	82,240
Napa	1,910	2,160	1,200	2,260	1,900
Nevada			25		202,920
Orange	9,360	600	48,125	240	99,640
Placer	12,690	1,125			11,780
Plumas	400	2,065	490		4,520
Riverside	5,680		12,255		234,720
Sacramento	52,500	500	3,250	2,800	471,500
San Benito	3,330		17,885		20,900
San Bernardino					16,610
San Diego	3,000	1,500	3,500		140,570
San Francisco	58,090	9,700	5,500		6,105,000
San Joaquin	312,645	4,220	160,735	1,560	312,660
San Luis Obispo	62,960	520	20,650	145	108,100
San Mateo	500	650	1,520		125,970
Santa Barbara					
Santa Clara	1,960	3,840			25,650
Santa Cruz					117,935
Shasta	940		1,945		242,355
Sierra		60	330		61,005
Siskiyou					
Solano	10,670	500	5,750	450	41,450
Sonoma					
Stanislaus	225,780	1,320	46,920	135	71,300
Sutter	92,525	1,160	17,650	830	60,825
Tehama	39,440		12,660		14,305
Trinity					11,000
Tulare	93,625	225	5,310	2,710	211,300
Tuolumne					
Ventura	24,430		24,650	610	184,765
Yolo	144,980		75,660		
Yuba	43,590		4,835		
Totals	\$2,239,435	\$112,020	\$1,041,210	\$27,425	\$13,430,765

SCHEDULE H—Continued.

Acres of Grapevines Growing in Spring of 1904.

Counties.	Table.		Raisins.		Wine.	
	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Alameda*						
Alpine*						
Amador	73				45	7
Butte*						
Calaveras	50	50	25	10	1,200	500
Colusa	40		350		50	
Contra Costa	820	105	60	10	1,460	800
Del Norte*						
El Dorado	340		140		1,900	220
Fresno	1,315	350	52,900	2,810	27,630	2,110
Glenn*						
Humboldt*						
Inyo			120			
Kern	100		1,000			
Kings			6,225	220	560	205
Lake	20				290	
Lassen*						
Los Angeles					6,825	
Madera	112		2,500		1,650	
Marin					430	10
Mariposa	100		100		150	
Mendocino*						
Merced	595	105	560	125	780	165
Modoc*						
Mono*						
Monterey	320				280	
Napa					5,000	2,000
Nevada	230				300	
Orange			250	150	750	
Placer	1,290		200		800	
Plumas*						
Riverside	20		290		100	
Sacramento	5,000		880		9,000	
San Benito	15				175	
San Bernardino			8,250	2,300	6,500	2,800
San Diego	200		4,500		500	
San Francisco*						
San Joaquin	1,640	1,890			1,120	2,035
San Luis Obispo	1,820	140			920	230
San Mateo					200	
Santa Barbara*						
Santa Clara	280	220			2,900	2,250
Santa Cruz	530				1,100	
Shasta	100		250		650	
Sierra*						
Siskiyou*						
Solano	550				1,080	565
Sonoma	450	150			16,850	1,170
Stanislaus	55		200		220	
Sutter	30		450	420	470	
Tehama	200		285		3,015	
Trinity	5					
Tulare	375	485	3,115	625	520	340
Tuolumne	360	220			1,700	280
Ventura	75		185		140	
Yolo			2,950		180	
Yuba	70	20	165	15	315	80
Totals	17,180	3,735	85,950	6,685	97,755	15,767

* No report.

SCHEDULE H—Continued.

Number of Fruit Trees Growing in Spring of 1904.

Counties.	Apple.		Apricot.		Cherry.	
	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.
Alameda	55,000	800	100,000	8,000	82,000	19,000
Alpine	1,700	200	75	20		
Amador	4,690	950	1,320	45	640	100
Butte	6,530		10,700		7,340	
Calaveras	6,000	4,000	2,000	1,000	500	200
Colusa	4,600	1,220	14,580	3,100	600	250
Contra Costa	9,400	955	47,265	4,360	8,725	850
Del Norte	8,200	700			600	
El Dorado	28,140	5,090	1,800	500	3,600	890
Fresno	8,000	2,600	27,000	560	60	
Glenn*						
Humboldt*						
Inyo	19,985		395		200	
Kern	7,000	3,000	20,000		1,000	
Kings	2,000		81,800	1,300		
Lake	13,645		1,195		440	
Lassen	48,765		300		1,135	
Los Angeles	136,110	31,710	115,610	6,300	175	1,075
Madera	3,500		5,850		35	
Marin	20,165	1,115	5,600	2,160	425	80
Mariposa	10,900		1,090		400	
Mendocino*						
Merced	4,200	955	16,000	4,110	325	60
Modoc	42,780		1,960		2,230	
Mono*						
Monterey	42,200	21,000	19,200	3,400	1,100	200
Napa	49,600	12,200	13,500	2,000	23,650	8,600
Nevada	16,300		2,400		1,200	
Orange	9,715	3,700	115,420	45,060		
Placer	19,400	6,770	14,900	7,670	16,200	9,000
Plumas	4,215	1,820				
Riverside	3,535	16,830	30,600	6,254	800	590
Sacramento	5,800	1,200	22,000	33,000	4,500	8,500
San Benito	8,500	1,100	14,500		2,500	
San Bernardino	12,500	1,500	47,500	1,800	9,800	2,300
San Diego*						
San Francisco*						
San Joaquin	9,760	1,820	95,745	3,980	21,985	5,220
San Luis Obispo	72,200	11,900	59,850	6,200	7,840	2,700
San Mateo	27,000	3,800	11,800	640	1,350	
Santa Barbara	13,590	7,490	7,120	1,865		
Santa Clara	17,100	39,000	541,250	9,400	129,100	21,600
Santa Cruz	285,365	272,325	36,245	33,740	18,095	5,170
Shasta	15,000		500		500	
Sierra	7,100				2,000	
Siskiyou*						
Solano	2,265		33,155		36,740	
Sonoma	210,470	72,470	18,990	2,530	42,620	18,840
Stanislaus	5,000	700	16,600	500	80	120
Sutter	5,350		5,500		1,500	
Tehama	17,500	1,650	63,745	4,710	3,310	1,670
Trinity	4,800	2,500	40	10	500	140
Tulare	2,515	1,560	75,970	590	250	
Tuolumne	4,000	5,000	2,000	560	2,800	365
Ventura	7,025	1,165	176,910	24,340	1,400	
Yolo	420		198,000		7,500	
Yuba	7,400	10,090	15,000	41,000	1,000	3,000
Totals	1,326,965	550,885	2,092,950	260,704	448,550	110,520

* No report.

SCHEDULE H—Continued.

Number of Fruit Trees Growing in Spring of 1904.

Counties.	Fig.		Olive.		Peach.	
	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.
Alameda	200	-----	4,300	1,000	86,000	1,100
Alpine	-----	-----	-----	-----	-----	-----
Amador	470	25	165	55	13,720	340
Butte	10,200	-----	113,725	-----	127,420	-----
Calaveras	400	200	5,000	1,000	4,000	1,000
Colusa	3,475	100	2,450	1,000	11,000	1,500
Contra Costa	2,560	620	18,275	4,375	25,935	3,565
Del Norte	-----	-----	-----	-----	300	-----
El Dorado	1,450	300	1,900	500	114,270	19,000
Fresno	14,000	160	1,100	-----	20,000	16,000
Glenn*	-----	-----	-----	-----	-----	-----
Humboldt*	-----	-----	-----	-----	-----	-----
Inyo	60	-----	-----	-----	5,300	-----
Kern	1,000	-----	5,000	-----	40,000	-----
Kings	-----	-----	-----	-----	167,000	47,500
Lake	800	-----	1,320	-----	8,105	-----
Lassen	-----	-----	-----	-----	865	-----
Los Angeles	1,750	560	373,430	57,110	146,745	12,710
Madera	635	-----	5,500	-----	22,500	-----
Marin	215	55	-----	-----	-----	-----
Mariposa	1,350	-----	9,000	-----	5,670	-----
Mendocino*	-----	-----	-----	-----	-----	-----
Merced	11,145	3,510	28,185	1,460	95,760	25,100
Modoc	-----	-----	-----	-----	2,850	-----
Mono*	-----	-----	-----	-----	-----	-----
Monterey	-----	-----	-----	-----	-----	-----
Napa	-----	-----	450	100	6,500	3,600
Nevada	1,650	200	52,000	1,200	97,650	12,670
Orange	380	-----	400	-----	6,500	-----
Placer	2,200	-----	19,115	-----	18,910	23,585
Plumas	5,100	2,960	36,000	20,000	804,200	597,600
Riverside	-----	-----	-----	-----	500	400
Sacramento	1,705	10	35,315	11,645	29,200	9,415
San Joaquin	1,200	2,600	12,200	6,500	11,000	38,000
San Benito	200	-----	300	-----	14,070	1,230
San Bernardino	1,600	800	21,500	13,000	62,000	2,000
San Diego*	-----	-----	-----	-----	-----	-----
San Francisco*	-----	-----	-----	-----	-----	-----
San Joaquin	4,430	1,030	18,820	4,330	138,710	19,510
San Luis Obispo	2,440	1,250	3,230	860	65,350	19,100
San Mateo	100	-----	8,750	800	1,200	-----
Santa Barbara	-----	-----	19,470	10,620	5,405	2,045
Santa Clara	1,600	530	9,320	4,750	510,700	37,900
Santa Cruz	360	150	720	620	17,575	1,420
Shasta	1,000	-----	12,000	-----	60,000	-----
Sierra	-----	-----	-----	-----	400	-----
Siskiyou*	-----	-----	-----	-----	-----	-----
Solano	5,430	-----	3,050	-----	322,570	-----
Sonoma	3,970	1,350	59,270	44,990	256,710	8,850
Stanislaus	4,000	6,000	9,600	400	20,800	16,000
Sutter	1,420	-----	1,025	-----	97,845	-----
Tehama	10,090	1,245	18,500	119,760	580,850	116,050
Trinity	15	10	10	-----	1,450	500
Tulare	3,715	460	1,245	945	280,378	10,870
Tuolumne	950	270	25	25	9,100	2,900
Ventura	-----	-----	35,380	-----	6,380	-----
Yolo	4,100	-----	20,000	-----	149,500	-----
Yuba	4,500	2,000	8,000	1,800	64,000	27,000
Totals	111,865	26,395	975,045	308,845	4,536,793	1,078,460

* No report.

SCHEDULE H—Continued.

Number of Fruit Trees Growing in Spring of 1904.

Counties.	Pear.		Prune (French).		Prune (other kinds).	
	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.
Alameda	66,000	4,000	145,000	22,000	2,100	400
Alpine			120	50		
Amador	6,215	70	1,230	1,340	230	60
Butte	20,995		73,125		15,430	
Calaveras	500	100	200	200	800	100
Colusa	26,095	575	72,400	100		
Contra Costa	64,125	16,180	32,450	6,530	8,515	1,415
Del Norte	650				1,500	
El Dorado	68,000	34,050	16,020	150	90,000	2,500
Fresno	1,040	480	2,600	960		
Glenn*						
Humboldt*						
Inyo	5,300		1,325		2,200	
Kern	1,500		70,000		1,000	
Kings			77,000	1,800	4,500	
Lake	16,730		41,880		4,190	
Lassen	1,895		570		1,470	
Los Angeles	15,325	8,070	25,750	3,065	23,845	750
Madera	2,000		4,200			
Marin				2,350	400	
Mariposa	2,550		1,000		1,200	
Mendocino*						
Merced	9,200	1,620	18,430	2,640		
Modoc	1,740				1,700	
Mono*						
Monterey	4,000	1,000			8,760	
Napa	58,260	2,250	125,840	56,400	34,000	1,850
Nevada	23,200		1,300			
Orange	3,280	1,560	20,450	5,820		
Placer	112,700	53,000	7,000	3,000	118,900	176,400
Plumas	800	600				
Riverside	9,575	3,735	38,295			
Sacramento	65,300	57,000	24,000	46,000	27,000	43,000
San Benito	9,500	2,500	75,000	7,000	8,000	
San Bernardino	2,800	800	21,500	13,000		
San Diego*						
San Francisco*						
San Joaquin	23,145	1,715	30,900	5,930	5,840	610
San Luis Obispo	37,300	8,900	160,400	31,020	44,200	9,600
San Mateo	4,000				31,000	
Santa Barbara	1,210	480	1,245	450	1,365	385
Santa Clara	122,150	15,700	3,920,140	357,400	48,710	37,900
Santa Cruz	15,600	2,480	112,990	16,140	19,265	4,995
Shasta	10,000		70,000		6,500	
Sierra					15	
Siskiyou*						
Solano	218,550		281,460		105,630	
Sonoma	76,240	23,970	480,670	110,260	44,590	5,290
Stanislaus	4,060	320	11,560	2,880		
Sutter	4,520		26,865		1,655	
Tehama	45,790	15,260	83,135	7,835	16,430	4,225
Trinity	500	200	1,000	200	500	100
Tulare	5,895		333,010	15,975	5,670	345
Tuolumne	2,300	500			300	150
Ventura			25,875			
Yolo	51,000		122,000			
Yuba	18,000	3,100	179,000	5,060	3,400	600
Totals	1,438,535	260,215	6,736,935	725,555	690,810	290,675

* No report.

Kings, miscellaneous, 7,100; Madera, nectarines, 2,450; San Benito, nectarines, 250; Santa Clara, nectarines 1,025, quinces 2,440.

SCHEDULE H—Continued.

Number of Fruit Trees Growing in Spring of 1904.

Counties.	Lemon.		Orange.		Almond.		Walnut.	
	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.	Bearing.	Non-Bearing.
Alameda	1,200	100	2,300	100	79,000	4,000	2,000	300
Alpine								
Amador	15	5	370	65	3,140	520	90	35
Butte	930		321,430		19,320		875	
Calaveras	50	50	250	250	800	300	500	500
Colusa	300	20	3,650	250	16,220	600	1,410	150
Contra Costa	330	75	1,100	130	147,825	50,875	3,450	2,430
Del Norte								
El Dorado	150		1,260	850	2,000	600	500	200
Fresno	160		1,200	400	200	10	25	30
Glenn*								
Humboldt*								
Inyo					200		375	
Kern	300		4,000		1,200		100	
Kings								
Lake			55					
Lassen					5,460		200	
Los Angeles	145,675	33,840	611,420	275,870	20		460	
Madera	40		175		42,615	8,175	95,235	63,415
Marin	35	20	535	75	1,075		50	
Mariposa	175		450		135	45	60	45
Mendocino*					425		250	
Merced	1,600	200	8,100	2,610				
Modoc					18,125	4,175	825	210
Mono*								
Monterey								
Napa	450	180	3,385	260	45,860	9,680	9,560	2,150
Nevada	180		320		380		425	
Orange	35,605	45,610	422,180	94,785			113,850	70,190
Placer	900	850	27,800	17,400	6,300	3,900	1,000	700
Plumas								
Riverside	111,567	7,075	995,000	309,075	10,145	1,500	1,400	20
Sacramento	1,500	950	24,800	20,000	32,700	30,000	1,900	1,700
San Benito			100		8,500		1,000	
San Bernardino	165,500	25,500	1,150,000	530,000	1,700	350	3,950	250
San Diego*								
San Francisco*								
San Joaquin	310		2,245	1,200	12,970	6,415	500	410
San Luis Obispo	14,800	7,560	4,210	1,580	6,000	720	25,250	10,780
San Mateo	110		120		560		550	
Santa Barbara	79,280	53,520	985	540	1,310		18,460	15,920
Santa Clara	365	695	990	725	15,420	4,940	9,250	2,450
Santa Cruz	165	90	145	80	340	30	1,370	4,555
Shasta	250		1,000		2,000		250	
Sierra								
Siskiyou*								
Solano	2,130		3,440		100,240		3,760	
Sonoma	740	250	8,710	2,010	7,020	3,015	4,040	1,380
Stanislaus	65	15	8,960	2,240	7,600	1,600	320	240
Sutter	55		735		25,720		60	
Tehama	405	280	4,900	5,480	62,205	945	3,970	500
Trinity	10	5			20	10	75	25
Tulare	32,800	575	177,240	47,960	1,200	385	500	240
Tuolumne	100	75	325	100	325	50	860	850
Ventura	61,530	4,190	83,135	19,990	14,385		69,240	10,965
Yolo	1,500		8,000		120,000		2,500	
Yuba	30,700	2,100	33,800	29,600	5,000	700	2,100	5,060
Totals	691,977	186,830	3,918,820	1,363,615	827,660	133,600	382,545	195,700

* No report.

SCHEDULE I.

Assessment of Telegraph and Telephone Lines, 1904.

Counties.	Western Union.	Pacific Postal.	Telephone.
Alameda	\$25,946	\$20,978	\$411,000
Alpine			300
Amador	2,000		7,489
Butte	4,655	3,105	23,338
Calaveras	620		7,415
Colusa	3,100	3,100	6,241
Contra Costa	16,360	3,335	88,755
Del Norte			1,100
El Dorado	390		6,990
Fresno	5,500	2,387	74,898
Glenn	2,943	2,508	19,625
Humboldt	4,000		53,215
Inyo	3,700		850
Kern	24,040	19,950	62,640
Kings	700	125	24,175
Lake			1,760
Lassen	2,500		400
Los Angeles			865,300
Madera	5,175	2,175	12,775
Marin	5,300		23,760
Mariposa	775		3,317
Mendocino	8,820		19,095
Merced	6,695	2,775	19,946
Modoc	1,200		450
Mono	1,280		1,455
Monterey	9,200		32,900
Napa	3,760		18,500
Nevada	6,170		25,440
Orange	930	2,925	26,490
Placer	17,090	920	18,400
Plumas	1,250		2,385
Riverside	11,375	400	46,530
Sacramento	19,600	2,250	115,550
San Benito	550		12,975
San Bernardino	16,720	21,670	53,290
San Diego	13,815	3,375	54,140
San Francisco	46,520	12,853	3,000,835
San Joaquin	13,324	5,940	69,300
San Luis Obispo	6,300		25,040
San Mateo	7,500		31,000
Santa Barbara	4,500		52,330
Santa Clara	13,555		69,900
Santa Cruz	2,135		34,975
Shasta	9,106	6,624	25,670
Sierra	400		4,000
Siskiyou	10,350	5,590	14,105
Solano	9,850	3,820	33,327
Sonoma	6,000		40,000
Stanislaus	4,875	1,775	25,545
Sutter	850	400	8,515
Tehama	6,475	4,175	11,275
Trinity			2,770
Tulare	9,025	4,200	40,945
Tuolumne	550		7,070
Ventura	5,260	838	32,420
Yolo	12,575	3,675	27,350
Yuba	2,340	600	17,780
Totals	\$397,449	\$142,468	\$5,717,041

SCHEDULE J.

Showing the Total Assessed Value of Property and Rates of State Taxation from 1850 to 1904.

Year.	Total Assessed Value of Property in California.	Value of Personal Property.	Per cent of Personal Property to Real Estate and Personal Property.	State Rate of Taxation.
1850	\$57,670,689	\$13,968,797	24.22	.50
1851	49,231,052	20,935,116	42.52	.65
1852	64,579,375	24,213,395	37.49	.65
1853	95,335,646	33,674,000	35.32	.60
1854	111,191,630	39,040,428	35.11	.60
1855	103,887,193	34,858,319	33.56	.60
1856	115,007,440	40,942,699	35.60	.70
1857	126,059,461	59,149,630	46.92	.70
1858	125,955,877	54,185,728	43.01	.60
1859	131,060,279	56,580,344	43.17	.60
1860	148,193,540	68,369,383	46.06	.60
1861	147,811,617	73,350,591	49.62	.60
1862	160,369,071	74,014,666	46.15	.77
1863	174,104,955	80,496,645	46.23	.92
1864	179,164,730	78,117,375	43.60	1.25
1865	183,534,312	79,782,436	43.47	1.15
1866	200,368,826	92,490,635	46.15	1.13
1867	212,205,339	100,105,600	47.17	1.13
1868	237,483,175	105,112,083	44.26	1.00
1869	260,563,879	104,723,592	40.19	.97
1870	277,538,134	108,001,588	38.90	.865
1871	267,868,126	86,174,230	32.17	.865
1872	637,232,823	219,942,323	30.40	.50
1873	528,747,043	118,425,520	22.20	.50
1874	611,495,197	210,779,127	34.46	.649
1875	618,083,315	199,243,292	32.07	.605
1876	595,073,177	140,431,866	25.27	.735
1877	586,953,022	128,780,824	21.77	.63
1878	584,578,036	118,304,451	20.23	.55
1879	549,220,968	112,325,850	20.45	.625
1880	666,399,985	174,514,906	26.18	.64
1881	659,835,762	160,058,309	24.24	.655
1882	608,642,036	134,048,419	22.02	.596
1883	765,729,430	167,338,644	21.85	.497
1884	821,078,767	166,394,997	20.26	.452
1885	859,512,384	172,760,681	27.90	.544
1886	816,446,700	151,937,132	24.64	.56
1887	756,337,008	164,444,909	17.20	.608
1888	1,108,044,877	172,768,272	15.60	.504
1889	1,115,014,022	170,981,078	16.00	.722
1890	1,099,772,904	168,960,150	16.00	.580
1891	1,241,231,105	189,843,998	15.29	.446
1892	1,275,832,510	186,900,252	14.61	.434
1893	1,211,572,074	169,763,846	14.01	.576
1894	1,204,976,952	163,104,050	13.54	.493
1895	1,132,712,674	161,790,103	14.28	.685
1896	1,263,771,936	177,352,419	14.03	.429
1897	1,088,736,160	161,453,052	14.85	.51
1898	1,129,473,765	157,155,181	13.92	.488
1899	1,194,677,895	215,065,438	18.02	.601
1900	1,218,228,075	228,229,874	18.72	.498
1901	1,241,705,803	235,464,341	19.75	.48
1902	1,289,676,062	240,042,076	19.60	.382
1903	1,597,166,031	275,225,429	17.23	.561
1904	1,550,389,541	282,529,530	18.22	.535

REPORT

OF THE

California State Board of Pharmacy.

1903-1904.



SACRAMENTO:

W. W. SHANNON, : : : : SUPERINTENDENT STATE PRINTING.
1904.

REPORT OF THE CALIFORNIA STATE BOARD OF PHARMACY.

SAN FRANCISCO, August 1, 1904.

To His Excellency, GEORGE C. PARDEE,

Governor of the State of California:

SIR: Herewith is submitted the annual report of the California State Board of Pharmacy, under the Act approved March 15, 1901.

Six regular sessions were held during the fiscal year, as follows: July 15, 1903, at San Francisco; October 6, 1903, at Los Angeles; October 12, 1903, at San Francisco; January 11, 1904, at San Francisco; April 4, 1904, at Los Angeles; April 11, 1904, at San Francisco.

FINANCIAL REPORT UNDER THE PHARMACY ACT OF MARCH 15, 1901.

RECEIPTS.

May 5, 1903—Cash on hand.....	\$160 06
May 5, 1903, to May 5, 1904—	
Licenses.....	\$6,231 00
Fines.....	22 50
Secretary, rent returned.....	30 00
Secretary, one half premium on bond.....	10 00
May 5, to July 1, 1904—Licenses.....	2,837 00
	<u>9,130 50</u>
Total receipts.....	<u>\$9,290 56</u>

DISBURSEMENTS.

Per diem and mileage of members from May 5, 1903, to July 1, 1904—	
H. J. Finger.....	\$1,637 25
J. J. Crowley.....	254 00
E. J. Molony.....	473 85
John Calvert.....	580 00
C. H. Rowley.....	1,626 60
	<u>\$4,571 70</u>
Printing, engrossing, stationery including stamped envelopes.....	\$597 28
Prosecutions.....	83 95
Express, telephones, telegraph, and typewriting.....	15 15
Secretary's salary, April 15, 1903, to July 1, 1904.....	1,015 00
Secretary, writing up new register.....	60 00
Secretary, further allowance.....	20 00
Clerical help.....	48 00
Rent and janitor.....	155 00
Fees returned and collections.....	13 50
Office furniture, library, and bookcase.....	68 25
Press clippings and advertising.....	46 46
Incidentals, including specimens for examination.....	29 05
	<u>2,151 64</u>
Total disbursements.....	<u>\$6,723 34</u>
Leaving a balance of \$2,567.22, which has been turned into the State Treasury.	

FINANCIAL REPORT UNDER THE ITINERANT VENDOR ACT OF
MARCH 20, 1903.

RECEIPTS.

July 1, 1903, to July 1, 1904—Licenses Nos. 1 to 9, inclusive \$1,800 00

DISBURSEMENTS.

Prosecutions, and services and mileage of members	\$816 60	
Clerical help, postage, and telegrams	20 50	
Services of C. W. Merritt	125 00	
		962 10
Balance (which has been turned in the State Treasury).....		\$837 90

The following members compose the Board at the date of this report: Charles H. Rowley, John J. Crowley, Henry J. Finger, Edward J. Molony, and John Calvert.

For the fiscal year 1903-04, Charles H. Rowley of Santa Barbara was elected president, and John Calvert of San Francisco, secretary.

The registrations for the fiscal year from May 5, 1903, to May 5, 1904, were: Licentiates in Pharmacy, 168; Assistants in Pharmacy, 60. The annual fee for re-registration of Licentiates was continued as heretofore and fixed at \$2, and for Assistants at \$1, both payable in advance.

The Board still adheres to its policy of refusing registration to applicants who hold diplomas from colleges of pharmacy or certificates from other boards of pharmacy; and except in such cases where a proper degree of proficiency, acquired by long experience, has been shown beyond any question of doubt, no registrations have been made other than by examination. In a number of instances claimants for registration who hold diplomas from colleges of pharmacy of other States, as well as some presenting credentials from other State boards, have been examined and found incompetent, consequently were rejected by this Board. It will thus be seen that this rule, while fulfilling the law for the protection of the people, has also accorded justice to the pharmacists by excluding unskilled competition.

An Act of the Legislature of California, entitled "An Act imposing a license tax upon itinerant vendors of drugs," etc., approved March 20, 1903, went into effect during the period covered by this report. By this Act an annual license fee of \$200 was levied upon itinerant vendors doing business in this State, and it was provided that said tax be paid to the State Board of Pharmacy, to constitute a special fund for the expenses of said Board of Pharmacy and for the enforcement of this Act and of the provisions of the Act or Acts creating such Board of Pharmacy. Under this law the Board collected for nine licenses, amounting to \$1,800, of which the sum of \$962.10 was expended, leaving a balance of \$837.90, which has been duly accounted for. While the expenditure of something more than half of the receipts under this Itinerant Vendor Act may seem excessive and unwarranted, it should

not be forgotten that during the term of the present Board of Pharmacy the Itinerant Vendor Law, so successful in other States, was first put into effect, with some changes applicable to California; and further, that many free lances, heretofore unrestrained in the sale of questionable drugs and nostrums, rebelled at interference "with their business," consequently it became necessary to thoroughly advertise this new law and to police the entire State through notice by circular and letter to county clerks, constables, and other proper officials, and by such further means as to the Board seemed best in order to give this new law the most widespread notoriety. It is thus shown that the proportionate expenses of the first year of the enactment of this law were greater than may hereafter occur. Notwithstanding this great expense, a goodly balance to the credit of the Board still remains, and it is believed by the Board that future results may prove even more satisfactory.

Herewith is a copy of receipt from the State Controller's department:

This is to certify, that the State Board of Pharmacy has paid to the Treasurer of the State of California the sum of \$3,405.12, to wit: contingent fund of State Board of Pharmacy:

From State Pharmacy Law	\$2,567 22
From Itinerant Vendor Law	837 90
	<hr/>
	\$3,405 12

Being the amount of receipts over expenditures from examinations and fees under the State Pharmacy Law of March 15, 1901, from May 5, 1903, to July 1, 1904, and from sales of licenses under the Itinerant Vendor Law of March 20, 1903, from date of Act to July 1, 1904, per report filed in this office, and that they are hereby discharged from all liabilities to the same.

(Signed:) E. P. COLGAN, Controller of State.

By W. W. DOUGLAS, Deputy.

Owing to the fact that this Board, for whose acts your Excellency must feel somewhat responsible, has been recently made the victim of unjust criticism, and further for the reason that the last extended report submitted was presented to a previous administration, it may not be out of place to now outline a brief history of this Board of Pharmacy since its creation in 1901, and to show wherein conservative and conscientious labors have influenced its every effort. When the present Board of Pharmacy was appointed, a little more than three years ago, there was practically nothing with which to conduct its affairs, and no money on hand to purchase material or working tools of any kind. The Board had no home or office for the transaction of business, unless a meager, unlighted inclosure in the rear of a drug-store could be so designated. Its Secretary claimed that the Board was even in debt to himself for current expenses, and that his "standing room only" was inadequate to his proper performance of required duties. A committee was at once appointed to obtain suitable quarters, not only for the purpose of securing reasonable conveniences for the Board's requirements, but also that the dignity of a State commission

might be properly upheld. Various locations were inspected and rejected, either from excessive rent or from inability to secure permanent occupancy. Quarters in the building of the Affiliated Colleges were considered, but, owing to distance from dwelling centers, and other objections apparent to the committee, they were not acceptable. Finally, through the courtesy of the College of Physicians and Surgeons, the Board was enabled to locate at No. 344 Fourteenth street. The faculty of the college offered the exclusive use of two commodious rooms and a half-room entry, together with light, heat, and security from interference. It was further agreed that, for the convenience of the Board in holding examinations, such private apartments, classrooms, chemical apparatus belonging to the college, and general freedom of the premises as needed, proper notice being given, would be granted for the benefit and use of the Board of Pharmacy, without other remuneration than the payment of a reasonable rent. In justice to the College of Physicians and Surgeons it must be said that a rigid observance of its offer and agreement has been adhered to. Its President has but once during three years visited this Board, and then only for about ten minutes, while its subordinate professors and adherents have, with one or two exceptions, scarcely made themselves acquainted. This explanation is made for the reason that no cause for jealousy, of late so persistently rumored, could possibly exist because of the Board of Pharmacy's occupancy of these quarters so generously tendered, so naturally accepted, and so agreeable to its uses. The Board therefore finds no reason to vacate said premises, unless at the pleasure of the college faculty.

Having secured its offices under such advantageous conditions, the Board proceeded on conservative lines, and by careful management and close attention to detail has built up a goodly system of account books for the Secretary's use, besides preparing and adopting printed forms, application blanks, and circular letters, applicable to numerous conditions arising almost daily.

In addition to the labor-saving stationery now at its command, the Board also owns a commodious roller-top office desk, a large fireproof safe, several cabinets for the filing of documents, and a bookcase, wherein are some forty volumes of the most recent standard pharmaceutical publications, all of which have been paid for out of its receipts. The Board is entirely free from debt and has a contingent fund of \$3,405.12 in the State Treasury, as shown by the financial report. During the past fiscal year the Board has had made a duplicate set of registers. One set, consisting of two separate Assistant and Licentiate volumes, is kept in the office for constant reference, while the other set, written up at the close of each quarterly meeting, is deposited in responsible bank vaults on the opposite side of the city, thus providing

a safeguard against fire or such other misfortune as might possibly occur.

It may be said, in this connection, that at no time since the first enactment of the California Pharmacy Law, on April 11, 1891, has any former Board—and there have been two previous ones—ever deposited any funds with the State Treasurer. No conclusion, however, should be drawn from this statement that the present Board of Pharmacy has resolved itself into a commercial or money-making institution; such financial prosperity results simply from impartial purpose and imperative demands for the payment of back dues and such other sums as might legally come to its treasury.

In this report attention is called to one important fact, *i. e.*, that while the financial receipts show but a trifling sum derived from prosecutions, the Board has by no means been inactive. As an experiment, the policy of the Board for the past year has been to try persuasion by personal interviews rather than forceful means through courts of law. Many have been induced to take examinations who otherwise would have been lost sight of and not now be registered; while others, once registered but negligent in payment, have been prevailed upon to pay arrears of dues, thus placing themselves in good standing without extra cost to themselves or undue expense to the Board, and thereby avoiding publicity and promoting a good fellowship which should at all times prevail. The result has proven very satisfactory, as the status of the Pharmacy Law of California has never been in a more presentable condition than at the date of this report; yet it should not be presumed by the general public, for whose protection this Board of Pharmacy was created, nor by the pharmacists of California, who alike are entitled to protection from fellow members of their profession attempting evasion of just obligations to State and public, that by the exercise of such peaceful means the State Board of Pharmacy is not watchful, alert, and at all times ready to adopt such aggressive means as circumstances may demand. While this Board of Pharmacy has, during the past year, prepared for war in time of peace, it is to be hoped that its course of action will be appreciated to such an extent that no change in policy will be necessary. To the pharmacists of the State is left the issue.

There are, at the present time, registered pharmacists in California as follows:

Licentiates in Pharmacy (those registered as fully qualified to own stores and to practice).....	1,479
Assistant Pharmacists (those qualified to practice only under the supervision of a Licentiate).....	413

These registered pharmacists are persons who have paid their re-registration fees, in compliance with the law, up to 1905 and are duly entered on the official register of the State Board. All others

have been omitted, as the pharmacy requirement particularly provides that all registered pharmacists, whether Practicing Pharmacist, Licentiate, or Assistant, shall pay annually in advance; consequently those who have not paid are considered as not registered. The following circular, which is self-explanatory, will soon be in the hands of all interested pharmacists for their immediate action, not only calling attention to undue neglect, but appealing to their pride:

It is the purpose of the State Board of Pharmacy to very shortly publish a list of the pharmacists of California, registered in compliance with the Act approved March 15, 1901, Section 6 of which reads in part:

"Every registered Pharmacist who desires to continue the practice of his profession in this State shall annually, on such date as the Board of Pharmacy may determine, pay to the Secretary of the said Board a registration fee to be fixed by the Board.

"Every registered Assistant Pharmacist who desires to continue the practice of his profession in this State shall, annually, on such date as the Board of Pharmacy may determine, pay to the Secretary of said Board a registration fee to be fixed by the Board."

These fees have been fixed by the Board to be \$2 for Licentiates, and \$1 for Assistants, and have been made payable in advance.

Should you desire your name to appear among those legally registered it will be necessary for you to remit all dues at once, otherwise your name will not be continued on the State register.

Very respectfully,

CALIFORNIA STATE BOARD OF PHARMACY.

That your Excellency may be fully informed regarding the Board's affairs, reference is again made, with your indulgence, to said Board's present status. Just previous to the date of this report, covering particularly the past twelve months, but as well including the action and policy of the Board since its creation in 1901, some of the San Francisco daily papers published articles derogatory to the Board's methods of conducting examinations and granting certificates of registration, and even insinuating that its disposition of moneys handled was corrupt. While it was plainly apparent to this Board that these articles were false, malicious, and grossly misleading, yet there seemed to be a necessity for some public vindication of its character and capabilities; therefore, in response to a letter addressed to your Excellency by the President of the Board, requesting a personal and most crucial examination into its affairs, there was promptly received a reply, in effect, that a commission composed of three gentlemen well known throughout the State for their ability, fairness, and undoubted integrity, would be delegated to the work of thoroughly investigating every act of this particular State Board. Though your Excellency did not, at that time, name the appointees on this commission, it has since been learned that Hon. John F. Davis, Code Commissioner of California, Hon. G. R. Lukens, State Senator from Alameda County, and Hon. F. W. Hatch, M.D., General Superintendent of State Hospitals, would devote their time and attention to such investigation as the situation demanded, and it is at once admitted that no better selections could have been made.

As a preliminary to this investigation, during the month of July

representative of the State Controller's department, Mr. W. W. Douglas, attended by his bookkeeper, appeared at the office of the Board and demanded all books, vouchers, documents, etc., for the purpose of checking up the financial receipts and disbursements. The labors of these gentlemen occupied five days of extended and thorough work, with a result that all yearly balances from the creation of this Board in 1901 to June 30, 1904, inclusive, were found absolutely correct—a fact of which we are justly proud. That no criticism could be found is vouched for by the official report of Mr. Douglas, as previously shown, thus clearing the Board from all charges of misappropriation of any funds. While the exact words of Mr. Douglas's report regarding the books and accounts of the State Board of Pharmacy are entirely unknown to the Board or any of its members, it may be gathered from the tenor of his remarks, made at the close of his expert work, that praise rather than censure was due the Board for accuracy of detail labor, and that its methods of safeguarding the public as well as securing impartial treatment to applicants could scarcely be improved upon.

The California State Board of Pharmacy as a body having nothing to fear, now awaits with patience the result of such crucial examination as it is hoped your Excellency's honorable commission will make regarding the alleged charges of unfair examinations, illegal registrations, corrupt methods, and personal favoritism, so freely believed by guileless reporters ever ready to listen, and so carelessly censored and published by a daily press never free from the temptation of springing a "sensation" and always keenly alive to a quarrel with an administration which it can not own.

In tendering this report it has been the aim of this Board of Pharmacy to set forth a true, conservative, and conscientious statement of its affairs. No plausible extenuation of its conduct is needed, and there is no desire to evade its heaviest responsibility, yet the wisest of human minds can not always satisfy the unfortunate applicant for favor, the jealous mind, those interested in ambitious schemes, or the public exactions governing State affairs.

It is hoped that your Excellency, while overlooking the length of this report, made so by the unfortunate circumstances which caused it, will have patience while one other matter of much importance is presented. For some time it has been recognized by those most competent to judge that the pharmacy enactment approved March 15, 1901, under which the present State Board is now working, is inadequate, unjust, and in some respects inconsistent with the object to be attained; it is therefore for the purpose of calling direct attention, that this further indulgence is asked. At various stated meetings during the past two years many discussions have taken place concerning a new and improved Pharmacy Law for California. In an earnest desire to arrive at some conclusion

whereby a better defined, more acceptable, and more consistent working text could be drafted for the guidance of this Board's successors in office, pharmacy enactments of sister States have been consulted and suggestions have been made by every member of this Board in reference to amendments to the present law. At the July meeting the subject was again introduced, and it was unanimously decided that at the October meeting in San Francisco a definite draft of suggestions should be submitted in writing by the various members for debate, and that such provisions as might be agreed upon should be submitted to your Excellency for approval, and further that should the same find favor the Legislature should be petitioned for their unanimous passage. These amendments will be proposed not only to insure greater safety to the people at large and to assist the pharmacists themselves, but as well to simplify the efforts of this or any future Board of Pharmacy for California in enforcing the law. No one should fail to recognize that too great care can not be exercised in distributing and dispensing drugs and poisons, and it is the ambition of this Board to have enacted a pharmacy law which shall not only be a credit to California, but as well become a standard for every State in the Union to copy. Your Excellency is therefore earnestly petitioned to give it your most careful consideration and support.

Respectfully submitted.

CALIFORNIA STATE BOARD OF PHARMACY.

ATTEST:

CHAS. H. ROWLEY, President.

JOHN J. CROWLY, Secretary.

EIGHTEENTH BIENNIAL REPORT

OF THE

STATE BOARD OF HEALTH

OF

CALIFORNIA,

FOR THE

FISCAL YEARS FROM JULY 1, 1902, TO JUNE 30, 1904.



SACRAMENTO:

W. W. SHANNON, - - - SUPERINTENDENT STATE PRINTING.
1904.

STATE BOARD OF HEALTH.

MARTIN REGENSBURGER, M.D., <i>President</i> ,	-	San Francisco
N. K. FOSTER, M.D., <i>Secretary</i> ,	- - - -	Sacramento
F. K. AINSWORTH, M.D.,	- - - - -	San Francisco
W. A. BRIGGS, M.D.,	- - - - -	Sacramento
A. C. HART, M.D.,	- - - - -	Sacramento
O. STANSBURY, M.D.,	- - - - -	Chico
W. LE MOYNE WILLS, M.D.,	- - - - -	Los Angeles

OFFICE OF CALIFORNIA STATE BOARD OF HEALTH,
SACRAMENTO, September 14, 1904.

To His Excellency GEORGE C. PARDEE,
Governor of California,

DEAR SIR: I have the honor to transmit to you herewith the
Eighteenth Biennial Report of the State Board of Health of California
for the fifty-fourth and fifty-fifth fiscal years.

Yours respectfully,

N. K. FOSTER,
Secretary, State Board of Health.

REPORT OF STATE BOARD OF HEALTH.

On April 1, 1903, Dr. W. A. Briggs of Sacramento, Dr. Matthew Gardner of San Francisco, Dr. N. K. Foster of Oakland, Dr. A. C. Hart of Sacramento, Dr. Martin Regensburger of San Francisco, Dr. O. Stansbury of Chico, and Dr. W. Le Moyne Wills of Los Angeles, who had recently been appointed members of the State Board of Health, met at Sacramento with the retiring Board. After the routine business had been completed, the new Board organized by electing Dr. Matthew Gardner of San Francisco, President, and Dr. N. K. Foster of Oakland, Secretary.

IN MEMORIAM.

Eighteen days after the organization of the Board, death entered its ranks and took from it the President, Dr. Matthew Gardner of San Francisco. His strong personality, sterling integrity and perseverance, as well as his great professional ability and wide experience, made him a most valuable member of the Board. He had served for a few months upon the former Board and represented the State most ably at the Plague Conference held in Washington, D. C., January 19, 1903. At that Conference, when the feeling against California was keen, his earnestness of purpose, straightforward manner, and evident integrity saved a great calamity to California—a quarantine by the Eastern States.

At the meeting of the Board May 11th, Dr. M. Regensburger announced the death of Dr. Gardner, and offered the following resolution:

WHEREAS, This Board being bereft of its honored President, Dr. Matthew Gardner; therefore, be it

Resolved by the State Board of Health, That in the death of Dr. Gardner our State has sustained an irreparable loss, the medical profession deprived of an exemplary representative, as also his patients of a good friend and his widow a noble husband.

Resolved, That the members of this Board extend their heartfelt sympathy to Mrs. Gardner and his family, and that a copy of these resolutions be transmitted to them and that the same be entered upon the minutes of this Board.

Owing to the death of Dr. Gardner a meeting of the Board was called for May 11th, at which Drs. Briggs, Hart, Regensburger, and Foster responded. Dr. Martin Regensburger was elected President.

On May 25th, Dr. F. K. Ainsworth of San Francisco was appointed and qualified to fill the vacancy caused by the death of Dr. Gardner.

When the members of the present Board took their positions there was no office room for them, the former Secretary having had desk room with the General Superintendent of State Hospitals. This office being crowded, the present Board was allowed to occupy temporarily the Lieutenant-Governor's room. There was absolutely no furniture in possession of the Board and enough had to be borrowed with which to begin business.

We have acquired, through the kindness of the Secretary of State and from our own appropriation, one bookcase, one letter file with card index, one report file with card index, one mimeograph, and one typewriter. Permanent office accommodations and proper furniture should be provided for the department. Much valuable information in the shape of reports and communications is being constantly received, which should be preserved and arranged so as to be of use. This can not be done without room and suitable furniture, and it is greatly to be hoped that the Legislature will find means to provide them.

POWERS AND DUTIES OF THE BOARD.

The State law relating to the duties of the State Board of Health is as follows:

The State Board of Health must place themselves in communication with the local boards of health, hospitals, asylums, and public institutions throughout the State, and take cognizance of the interests of health and life among the citizens generally. They must make sanitary investigations and inquiries respecting the causes of disease, especially of epidemics, the source of mortality, and the effects of localities, employments, conditions, and circumstances on the public health, and gather such information in respect to these matters as they may deem proper for diffusion among the people. They may devise some scheme whereby medical and vital statistics of sanitary value can be obtained, and act as an advisory board to the State in all hygienic and medical matters, especially such as relate to the location, construction, sewerage, and administration of prisons, hospitals, asylums, and other public institutions. They must, at each biennial session of the Legislature, make a report, with such suggestions as to legislative action as they deem proper.

This Act gives the Board a broad field of investigation and work, with but little power to make its work effective. We can communicate with local health boards, but it is optional with them to answer or not. We can "take cognizance of the interests of health and life among the citizens generally," but when it comes to enforcing proper measures to protect their life and health we are practically powerless to act. We can make sanitary investigations as to causes of disease and epidemics, but having found those causes we have no means of eradicating them. We can gather information for diffusion among the people, but have not the means to print and mail it, and can only reach the people through the good nature of the public press. We can devise schemes to gather vital statistics, but our schemes have not the power of law. We can act as an advisory board to State institutions, and here we have

received nothing but courtesy and feel that we may have been of some service to the State. Lastly, we can make our report to the Legislature and offer such suggestions as we think proper. Such suggestions will be found throughout this report.

The limitation of the powers and means of the Board deprives the State of much information that should be distributed in the form of circulars instructing the people in regard to the many things pertaining to health. We could also do much to prevent and suppress disease. There is nothing of which the people are so careless as their health, except it is, perhaps, the health of others. They will go along heedlessly neglecting all sanitary precautions and oftentimes considering it a violation of their private rights if they are in any way taken to task. They will use water polluted with washings of barnyards and houses, and think nothing of it. They will allow children sick with contagious diseases to associate with the well. They will tolerate schoolhouses with poor light and worse ventilation. They will disregard all sanitary rules as applied to themselves or others. If an effort be made by the health authorities to suppress an epidemic of some contagious disease, they are often up in arms over the matter, deploring the cost and trouble. But let the glanders break out among horses, or the Texas fever attack cattle, and the whole community is alive to the danger, for a direct pecuniary loss stares them in the face. This is not because they care nothing for themselves or others, but from a careless indifference, often engendered by an idea that sickness is a direct visitation of Divine Power—something that must come, no matter what they do.

Of the 28,610 deaths reported in California during the past two years, 5,798 were from preventable diseases, or one in every six. It will perhaps be impossible to entirely eradicate all such diseases, but of those dying in the State at least ten per cent could have been saved had proper precautions and sanitary rules been observed.

Typhoid fever, a disease which is largely carried by means of water and milk, is a good example of a preventable disease. There have been reported in California during the last two years 244 deaths from this disease. This does not represent the actual death-rate, for from the mountain districts, where we have had the greatest loss of life, we get few reports. Every case of typhoid fever comes from another case, and more frequently than otherwise from a case situated on a higher level, so that the water polluted by the discharges flows to those below and, being used, generates the disease. From one case high up in a watershed the disease has been traced, marching slowly but surely down through towns and communities using the water, until thousands of cases and many deaths have occurred. This is but an example of how one disease is communicated; but if the people could be made to know these things and feel that upon them and their care depends in a great measure

the health of the State, a forward step would have been taken. They should be thoroughly instructed as to the danger of using polluted water and the means of disinfection so as to avoid polluting the water that others may possibly use. They should know that troubles from indigestion often arise from milk that has not been kept clean and sanitary. They should be instructed in the dangers of bad air, insects, bad drainage, expectorating where it can affect others, and many other subjects pertaining to sanitation.

The State Board of Health has given its earnest attention to the investigation of the causes of disease, especially those preventable ones which are carrying off such large numbers of our inhabitants. These will be mentioned under their respective heads. In our investigations of epidemics we have often been able to give advice and aid which have been appreciated and productive of good. Occasionally we have met severe and bitter opposition when trying to remove the evident cause of trouble, and have keenly felt our want of power to enforce a much needed reform. We would recommend that the Board be given power to abate nuisances and prevent the pollution of streams where there is unmistakable evidence of poisoning. The ordinary process of law is too slow. While waiting for the wheels to start the mischief is done.

PLAGUE.

This Board was met at the threshold of its work with as serious a problem as has ever been presented to any State Board of Health. Since March, 1900, plague had been recognized in San Francisco by eminent physicians and bacteriologists. The correctness of their diagnosis had, however, been stoutly denied. During the preceding three months, upward of 250,000 deaths had occurred from the disease throughout the world, scattered widely among the different nations. A feeling of intense anxiety was felt in the East, increased no doubt by the exaggerated reports of the extent of the disease in California on one side, and the persistent denial of its existence on the other. A feeling was rife that either we did not recognize the gravity of the situation, or were willfully hiding it, either of which was fatal to confidence.

On January 19, 1903, a Plague Conference was held in Washington, D. C., called by Dr. Wyman, Surgeon-General of the United States Public Health and Marine-Hospital Service, at the request of the Boards of Health of twenty-one Eastern States. At that Conference an exceedingly strong sentiment was shown to quarantine this State, and a resolution was introduced which would have virtually accomplished that purpose. After a lengthy discussion it was left as unfinished business until the next Conference, which was to be held in a few months. This was to give the sanitary authorities of California an

opportunity to demonstrate their willingness and ability to cope satisfactorily with the situation, and by effective work offer a guarantee of good faith and protection to the country against the spread of the dreaded disease. To this work the Board at once directed its energies. Prior to the organization of the present Board, the old Board on February 9th had entered into an agreement, as follows:

A Preliminary Plan for the Eradication of Plague in Chinatown, as agreed upon by Dr. Gardner, personal representative of the Governor, Dr. A. P. O'Brien for City Board of Health, and Drs. Glennan and Blue for the United States Public Health and Marine-Hospital Service.

First—Dr. Matthew Gardner, representing the State, will pay three medical inspectors, two sanitary inspectors, and two Chinese interpreters.

Second—The City Board of Health will begin immediately the extermination of rats by means of traps and poison, employing three sewer men for the purpose. Fifty additional traps will be supplied for this work. The city agrees also to disinfect immediately all infected places, and will cause the renovation of such habitations in a manner satisfactory to the health authorities.

Third—The city further agrees to have the streets of the Chinese district thoroughly swept at least three times a week, and the same flushed with water once a week. A per capita price will be paid for rats found in Chinatown. An extra effort will be made for the removal of garbage and the sanitation of back areas, etc.

Fourth—The United States Public Health and Marine-Hospital Service will exercise immediate supervision over this work in conjunction with State and city authorities, and will furnish for the prosecution of the work a bacteriologist and laboratory, three medical officers (more as needed), and two Chinese interpreters.

Finally, it is agreed that all cases of plague shall be reported to the proper authorities. That all inspectors shall report daily at 641 Merchant street, U. S. Plague Laboratory, for instructions; that inspectors shall be required to make daily reports of their observations and the number of sick and dead seen by them. Their whole time shall be devoted to such duties. That the Chinese make every concession toward a thorough inspection of all the sick and dead in Chinatown.

The above work to be continued for at least one year from date of adoption of the plan.

The City Board of Health agrees to recommend to the Board of Public Works and to the Board of Supervisors that Dupont street be paved with bitumen from California street to Broadway.

The City Board of Health to immediately memorialize the Board of Supervisors to provide sufficient funds for the purpose of carrying out the obligations assumed by it herein.

On May 23, 1903, this agreement was indorsed by Dr. Martin Regensburger, President, and Dr. N. K. Foster, Secretary of the State Board of Health, and the work has ever since been conducted practically under its terms. The Board adopted a policy of hard work and publicity. We believed that only hard, persistent, long-continued work, along definite lines which were well thought out, could eradicate the disease, and that the world, being vitally interested in the situation, had a right to know what we were doing. We were severely criticised in some quarters for not officially discussing the "plague situation in San Francisco" from the first and declaring our policy and what we would do. We preferred to work out results.

On June 3, 1903, the second Conference was held at Washington. At the Conference in January a resolution was adopted asking the Surgeon-General to inform the different State Boards of Health two weeks in advance of this meeting how well the California authorities were handling the situation, so they would be ready to deal intelligently with it at this meeting. California was represented by Drs. F. K. Ainsworth and N. K. Foster of the State Board, and as soon as the routine work was done these gentlemen were called upon to report for California. In the April and May reports of the State Board the plague situation had been honestly reported and each State Board furnished with a copy. This and their intimate knowledge of what we were doing had somewhat relieved the situation. A frank statement of what was being done and what we proposed to do was made to the Conference. A request was made for suggestions as to methods, with a promise to carry them out. By the authority of Governor Pardee, an invitation was extended to the Conference to send, at our expense, a committee of three to investigate and satisfy themselves and help us. The Conference, however, expressed its satisfaction and declared it unnecessary, and adopted unanimously the following resolution:

WHEREAS, The Conference of the State Boards of Health of the United States with the Public Health and Marine-Hospital Service, having confidence in the earnest efforts and ability of the Governor and State Board of Health of the State of California, acting in harmony with the Bureau of Public Health and Marine-Hospital Service, to thoroughly eradicate bubonic plague heretofore existing in the city of San Francisco, do resolve that in the judgment of this Conference, so long as the present effective work is continued, there is no need for quarantine restrictions on travel or traffic to or from the State.

On June 3, 1904, the Conference again met at Washington, and California was represented as the year before by Drs. F. K. Ainsworth and N. K. Foster. This was in no sense a plague conference, as that disease had become of only general interest. Confidence was fully restored, and no anxiety was felt about the ability and willingness of California to handle her sanitary affairs. The following resolution was unanimously adopted:

Resolved, That this Conference expresses its confidence in the present methods in force in California in dealing with plague, and that it extends its congratulations to the National, State, and municipal sanitary authorities for their harmonious action in the control of this disease.

It is the belief of this Board that where possible sanitary work should be done by the municipality. The gravity of the situation in San Francisco, however, and the fact that the whole State was vitally interested in the result, made it necessary that the State Board take an active hand. At the same time the great mass of the work has fallen on the authorities of San Francisco, and they have done it nobly. The work done by the different boards is so interwoven that it is impossible to segregate it, giving each due credit. To facilitate and systematize the

work the infected area was divided into districts, each under a State inspector, who is a thoroughly educated physician. He is furnished with a book, in which is entered the number of each house, the number of each room, and the name and occupation of the occupant, as near as can be ascertained. This gives him a more or less perfect directory of the inhabitants. At each visit he notes the sanitary condition and the whereabouts of the occupant. All sick are thoroughly examined when found, and hospitals and drug stores are closely supervised. Upon the city authorities devolves the work of condemning unsanitary places and tearing them out, and this work has been done in a thorough and systematic manner, causing as little hardship as possible, but ever keeping in view the one great end—of making Chinatown sanitary. The areas behind buildings had been filled with wooden buildings which shut out entirely light and air. Many people lived in basements which were foul to the extreme. To succeed in eradicating a disease which is essentially one of filth, this must be changed. After condemning these places as unsanitary, a wrecking crew takes charge and tears out all wooden structures and floors, which are burned in the street. The earth, if foul, is removed for a few inches, and the place is turned over to the sanitary inspector, who is one of the State employés. With carbolic acid and chlorid of lime, furnished by the city, he thoroughly disinfects the place, after which improvements are allowed along the following lines laid down by the sanitary authorities: (1) In the areas a one-story structure may be built with a glass roof and a concrete floor; (2) In the basements there must be a concrete floor over the whole extent and the walls made solid, so as to exclude rats.

The sanitary authorities, recognizing the intimate relation between rats and plague, and fearing that all their work would be made useless unless the rodents be denied admission to buildings, are striving to make the buildings rat-proof. They are also trapping them and using the Danysz virus, which is destructive to rats and mice, but harmless to domestic animals and man.

Ever since the organization of the present Board, representatives of it have each month met with the United States Public Health and Marine-Hospital officials, and representatives from the City Board of Health, Board of Supervisors, and Mercantile Associations, to discuss plans and lay out work. It was felt that by organizing and making this a permanent association much more good could be accomplished. As a result of this conviction, the Public Health Commission of California was organized. The membership consists of the Governor of the State and Mayor of San Francisco as ex-officio members, the resident officers of the United States Public Health and Marine-Hospital Service, members of the State Board of Health and City Board of Health, representatives of the different mercantile associations, and health officers of other cities.

Meetings are held monthly, or oftener if needed, at the United States Public Health and Marine-Hospital Service laboratory at 641 Merchant street, San Francisco. Sanitary questions of interest are discussed and recommendations made. These meetings aid in maintaining an enthusiasm in the work and in keeping all branches concerned in touch with each other.

The nature of the work being done to make Chinatown sanitary is such that it is impossible to give in figures much idea of its extent, but the following will be of interest:

Work Done in Chinatown during the Year ending June 30, 1904.

Basements and cellars torn out.....	155
Basements and cellars concreted.....	139
Rear areas torn out.....	173
Rear areas rebuilt.....	113
Buildings totally destroyed.....	7
Buildings refitted with new plumbing.....	71
New toilets erected.....	72
One half frontage on one block entirely rebuilt.	

Work Done in Chinatown by State Employés from March 11, 1903, to August 1, 1904.

Number of buildings inspected and reinspected.....	15,296
Number of rooms inspected and reinspected.....	104,709
Number of persons inspected.....	124,212
Number of sick inspected.....	1,122
Number of dead examined.....	537
Number of necropsies.....	187
Number of places supervised for disinfection.....	58,563

The disinfectors have used in their work hundreds of barrels of carbolic acid and drums of chlorid of lime, and it is safe to say that Chinatown has never been so free from odors other than these.

The deaths for the year ending June 30th were 371, of which 17 were from violence, 132 from pulmonary tuberculosis, and 11 from other forms of tuberculosis. The population of Chinatown is about 15,000. Many of the deaths should not, however, be charged to this population, as the Chinese come from all over the Pacific Coast to San Francisco when sick, and in some cases from the Eastern States. There have been in all 119 cases of plague, with 113 deaths. Nearly all the cases have been within the limits of ten blocks. These are, by years, as follows:

	Cases.	Deaths.	Recoveries.
1900.....	22	22	0
1901.....	30	25	5
1902.....	41	41	0
1903.....	17	17	0
1904.....	9	8	1
Totals.....	119	113	6

Three of these cases have come from outside, all from the country. The first, September 11, 1903, occurred in Pacheco. It was in an

old factory building, which was rat-infested, and by recommendation of the State Board of Health was burned by the Board of Supervisors, and no more cases occurred from it. The second case was a railroad man who had lately been in San Francisco getting laborers and might have contracted it there. The third, a woman, near Concord, who had not been away from home for several weeks. Rats had been found dead at the barn, and it is quite probable that they carried the infection. As these cases occurred near where grain ships had anchored before loading and as these ships often come from foreign ports, it is more than probable that infected rats had landed from them. At the request of the State Board of Health, the United States Public Health and Marine-Hospital Service sulfured these ships and destroyed the rats aboard. The county authorities, at the suggestion of this Board, took up the matter of destroying the rats, and no case has occurred since February, 1904, six months after taking up the work.

It is a pleasure to this Board, as well as justice, to record the great aid extended to California by the United States Public Health and Marine-Hospital Service, and its corps of officers. To Surgeon-General Wyman, for his steadfast faith in California, his uniform kindness and courtesy, and for his detailing of eminent and efficient officers to aid us; to Passed Assistant Surgeons Glennan and Blue, who have at different times had charge of the work, to which they have brought untiring zeal and ability; and to Drs. Currie, Lloyd, and Trotter, who have ably seconded their efforts, California will ever owe a debt of gratitude. The maintaining of a laboratory, with eminent bacteriologists to make examinations, has been a source of great help to this Board, as well as giving confidence in the East. The quarantine station on Angel Island, under the able management of Passed Assistant Surgeon Cummings, is a source of protection to the State. No freight or passengers are allowed to pass in until he is satisfied that they are not in any way affected with disease. If coming from an infected port and not having been disinfected, he thoroughly disinfects them before landing. The expense of this station to the United States Government is about \$50,000 per year for maintenance. The plant itself is very expensive and is constantly being improved.

Recognizing the danger of the disease being carried to other parts of the State by the moving of inhabitants from the infected portions of San Francisco, the State Board of Health adopted the following resolution at a meeting held January 5, 1904:

Realizing the danger of constant communication between the Chinese of San Francisco and those in the interior of the State, and in order to thoroughly stamp out bubonic plague in California, be it

Resolved, That the Secretary of the State Board of Health communicate with the various Boards of Health throughout the State, requesting them to hold post mortems on all inhabitants dying in Chinese districts, and in the event of death being due to

obscure or suspicious cause, that sections be made and forwarded to the United States Marine-Hospital Service at San Francisco for a report. In the event that death be found to be due to bubonic plague, the Secretary is authorized to communicate with the local Boards of Supervisors, warning them of their imminent danger and urging them to take drastic measures to eradicate the disease from their midst.

This was sent in the following circular letter to all counties of the State where Chinese quarters existed:

To the Board of Health of ———,

DEAR SIRS: You will notice that the inclosed resolution requires a post mortem upon *all* inhabitants dying in Chinese districts. No distinction can be made as to race.

The occasional occurrence of cases of plague outside of San Francisco makes it highly desirable and necessary that extraordinary care be taken in all communities where Chinatowns exist.

If a case should be found that is suspicious, take a small section of the affected gland or spleen, preferably the affected gland, wrap it carefully in a little cotton, place it in a small tin box thoroughly soldered, and send at once by express to the United States Marine-Hospital Service laboratory, 641 Merchant street, San Francisco, Cal.

I hope that all Health Officers will faithfully and conscientiously attend to this matter, for it is of vital importance to the health and reputation of our State. In San Francisco, we have in a great measure subdued the trouble, but occasional occurrences of cases on the outside make it necessary to take this step.

I would also recommend that the same care be exercised upon any suspicious case occurring in your jurisdiction, even if outside the Chinese quarters.

Yours very truly,

N. K. FOSTER, Secretary.

The Board has systematically examined the Chinese quarters of the different towns, and has paid particular attention to camps located along the rivers, where the men work on ranches and are outside the sanitary supervision which they receive in the cities. In this work we sometimes meet with opposition, the violators of sanitary laws thinking they are responsible to no one. The camps are growing in extent, and from them comes a large share of the vegetables consumed. We would earnestly recommend that the members of the State Board of Health, or their authorized inspector, be vested with police power in sanitary matters and allowed to wear some suitable badge of authority.

In order that every case might be thoroughly investigated and none pass which might possibly be plague, and also to prove every case so reported, the Governor ordered the establishment of a State bacteriological laboratory. All suspected cases of plague now have three separate and distinct examinations—one by the United States Public Health and Marine-Hospital Service, one by the State, and one by the city. This precludes any possibility of mistake, and perfect assurance can be felt that every case reported is genuine and that none escape.

TUBERCULOSIS.

The subject of tuberculosis is one of ever increasing interest and concern to the people and taxpayers of California. Already three and one half times as many die of consumption in the State as from the united

causes of smallpox, diphtheria, scarlet fever, typhoid fever, and whooping-cough. One out of every six and a half deaths is caused by this disease. The time of far greatest prevalence in the age of its victims is between 20 and 50, or the productive period of life. The young and the old, although not exempt, are far less liable to the disease.

The pure air and mild climate of California, making it not only possible but pleasant to live out of doors the year round, are inducing thousands of consumptives from the States with more rigorous climates to seek our shores, hoping thus to be cured. These we can not deny admission, but they increase our death-rate and are a direct menace, as they are so many more sources of infection; besides, many of them, being without means, sooner or later become public charges. These facts make it more than a sanitary or humanitarian question. It has got to be faced as a financial and social one, and comes eminently in the domain of the statesman.

The old idea that consumption is hereditary has passed away under the light of bacteriological investigation, and instead we know that it is an infectious disease, and that each case is contracted from some other case. Further, we know now that instead of being incurable, as was formerly supposed, it is perfectly so if taken early and the patient properly cared for. The problem is, then, twofold: to prevent and to cure. If all would act together and intelligently the disease might be stamped out of existence, but this is at present not to be expected.

In many parts of the country sanatoria are being established which give glowing reports of success. It is yet too early to judge fully of their success in this State as compared with what can be done outside them. It is simply impossible to build sanatoria for all our consumptives, hence we should make our whole State as nearly as possible a sanitary one. Stringent laws, both State and municipal, should be passed prohibiting those practices which favor the spread of the disease. The schoolrooms should be frequently disinfected. No teacher should be employed who is afflicted with the disease, and the pupils should be regularly examined. Particular attention should be given to ventilating the schoolroom, and overcrowding and foul air avoided. There can be no doubt that many cases of consumption start from the schoolroom, and these can and should be avoided. Theaters, churches, halls, and all places of public amusement should also be thoroughly and frequently disinfected, and all public conveyances be kept thoroughly clean. A more earnest effort should be made to prevent the too common habit of expectorating in public places. This is no doubt a great cause of the spread of consumption, and could be stopped if local police authorities were more vigorous in enforcing the law. Important as are all these things, consumption can not be stamped out or very materially lessened until the people find out that their home

life has more to do with it than their public life. All the above things should be done, because it is right and will in a measure educate the people; but if they persist in living and sleeping in overheated rooms, often without the possibility of a change of air, the clean school and theater will not save them. The fact that proper breathing of only pure air will do more to prevent consumption than all else should persistently and systematically be forced upon the people. The State Board of Health should be provided with means to furnish literature for general distribution, and possibly to lecture in the smaller places. In cities where there are active health boards this is done already to a certain extent, but the country districts, not being so well organized or equipped, need the help of the State.

The eradication of consumption is more a matter of education than anything else. The people must know the dangers in order to avoid them. They need to know that the consumptive is a danger and a menace to others only as he makes himself so, by scattering the germs of his disease broadcast through expectoration; that the discharges from consumptive lungs and throats should always be destroyed; that pure air properly breathed is at all times necessary, and that the disease can be cured if taken early.

TYPHOID FEVER.

There have been several epidemics of typhoid fever. That there have not been more is a matter of good luck; that they were not more extensive is the result of good, earnest, and skilled work by the health authorities who had to deal with them. This Board has visited the scene of several epidemics of typhoid fever in different parts of the State to satisfy itself that everything possible was being done by the local boards to prevent its spread, and also to study the causes. In every case the local authorities had quickly grasped the situation and had suppressed in its early stages what might have been a more serious outbreak.

At Palo Alto, where for a time the disease was severe, it was quite readily traced to a milk supply contaminated by the water used for dairy purposes, which had become polluted by waste from houses where fever cases existed. After the removal of the dairy to a locality where a clean supply of water could be obtained the fever soon subsided, only a few secondary cases occurring.

The most severe epidemic was at McCloud, a lumber camp in Siskiyou County. The town has three thousand inhabitants, is well built, is supplied with an unusually pure water, and has a good sewer system. This sewer system emptied into a creek on which, a few miles below, was situated the dairy supply of the town. The physician and superintendent of the lumber company at once began an investigation, and had

the milk and water examined. The drinking water came from high up in the mountains and was pure and wholesome, but the milk gave direct evidence of pollution. This must have come to the milk from the water in the creek, which was freely used for dairy purposes. Recognizing this as the cause, the dairy was moved to a creek remote from the possibility of pollution, and the disease was checked. The State Board advised that a system of sewage destruction be installed, as the town of McCloud was endangering the lives of people below by allowing its sewage to pass into the stream. This the lumber company, which owns the mills and village and controls the situation, did, showing a willingness to do anything this Board suggested. The readiness of this private corporation to conform to the law and protect the lives of citizens below is in marked contrast to the attitude of some of our municipal and private corporations, which, without hesitation, pollute the public streams.

At Le Moine, another lumber camp, was a somewhat severe epidemic. There being no milk supply at the camp, that source of dissemination was excluded. The water supply was twofold: from a spring, and from a creek high up in the mountains, with no apparent source of pollution, as there were no habitations or camps above. A mile or more above, in the gulch in which is situated the spring, is a logging camp. No stream runs down, the small amount of water at the camp settling into the ground. Thinking that this might be the source of infection, the inhabitants were instructed not to use the water from the spring. The probability of this being true seemed small, but it was thought best to take no chances. We could find no certain cause of the epidemic, but reasoning by exclusion, we came to the conclusion that the disease was carried by the flies which swarmed in the camp. There was a constant change in help—men coming, working a few days or weeks, and passing on. It is probable that some one who had recovered from typhoid, or who was suffering from a walking type, came to the camp, and the disease germs were carried from his dejecta to the food by flies. A thorough cleaning of the camp and protection from this source of danger soon conquered the epidemic. The present season has developed but one case in the camp.

LEPROSY.

On April 10, 1904, Dr. C. C. Sherman, Health Officer at Colton, reported a case of leprosy and asked for instructions. The laws expressly state that "the Board of Supervisors are vested with power and are required to make all necessary provisions for the separation, detention, and care of lepers, or persons affected with leprosy." This was communicated to the health officer, but this Board took the matter up with the

Commissioner of Immigration, for the purpose of having the patient deported, which we are pleased to report was accomplished after several months' time.

The question of the care of lepers is one of considerable interest to the State, as we frequently have immigrants who have the disease. For each county which might have a case, to support a lazaretto would entail a needless expense, as all cases in the State could be cared for at one institution, the county from which the patient comes bearing the expense of his care. We would suggest that a committee be appointed to investigate and report on this subject.

SMALLPOX.

Like most of the other States, we have had a large number of cases of smallpox, which fortunately have not been attended with great mortality. The incompleteness of statistics makes it impossible to give figures accurate enough to be of value. The principal interest attached to the present epidemic is its mildness and the propensity of many to make a wrong diagnosis, calling it Cuban, Manila, or Adobe Itch, Impetigo Contagiosa, or Chickenpox. Its mildness may be from either one of two causes: first, the human family is becoming immune by means of persistent vaccination; or second, that the present epidemic is for some unknown reason light. In either case, the need of continued vaccination is demonstrated. That vaccination will prevent smallpox is too well proven to need discussion. If the present mild epidemic is due to vaccination having caused immunity, vaccination should be continued or this immunity will lessen and the old death-rate, reaching in some epidemics as high as fifty per cent, will return. If, on the other hand, it is caused by a mild poison in the present epidemic, we are liable at any time to be afflicted with a severe form of the disease, which will cause the same mortality as in the past. That the disease should be called by some other name is no doubt often a mistake, but it is equally certain that it has been so called for fear of injury to the locality. This is a mistaken idea, for with the present methods of controlling epidemics, and especially the ease with which one can be protected from smallpox by vaccination, there should be no unnecessary alarm; nor is a locality as likely to be avoided if the disease is acknowledged and properly cared for, as it would be if the opposite course of denial were followed.

VACCINATION.

The question of vaccination is one that always brings out a small but earnest opposition. That vaccination will protect against smallpox is established beyond dispute. The disease has been almost entirely eradicated from those countries where compulsory vaccination and revaccination are practiced, notably Germany. In those cases where

protection is not entire, owing to incomplete vaccination or exhaustion by time, the disease is rendered much less severe.

The following vaccination creed is from the Commissioner of Health of Chicago, and is adopted by others who have had extended experience:

First—That true vaccination, repeated until it no longer "takes," *always* prevents smallpox. *Nothing else does.*

Second—That true vaccination—that is, vaccination properly done on a *clean* arm, with *pure* lymph, and kept perfectly *clean* and *unbroken* afterwards—never did and *never* will make a serious sore.

Third—That such a vaccination leaves a characteristic scar, unlike that from any other cause, which is recognizable during life, and is the *only* evidence of a successful vaccination.

Fourth—That a slight disturbance of the general system at the time that the vaccination is at its height, is an indication that the entire system has been affected by the introduction of the virus, and is, therefore, to be welcomed as an indication of protection rather than dreaded.

Fifth—That no untoward results ever follow such vaccination, but that on the other hand, thousands of lives are annually sacrificed through the neglect to vaccinate—a neglect begotten of *lack of knowledge.*

This Board believes that vaccination will prevent smallpox, and that it should be practiced and enforced among all classes of people, as it is in some countries where they have succeeded in completely stamping out the disease. The present law is too inadequate, but by its strict enforcement much good can be done. The Board sent a circular letter to all county superintendents of schools, calling attention to the law and urging its enforcement, and it is being done in most of the larger places and in many of the smaller, with the result that there are at present but few cases of smallpox in the State, and these mostly confined to remote places where vaccination is not practiced.

This Board has been called upon to make many investigations in different parts of the State and to decide controversies as to the nature of the disease. In all cases where assistance has been asked it has been promptly rendered either by a member of the Board or by an expert sent at our expense. The reports of these visits have been made and are on file in this office. Being quite voluminous we think it unnecessary to publish them. In every case a decision was rendered and all parties seemed to concur.

WATER POLLUTION.

There is probably no subject with which this Board has to deal that is of so much importance to the public health, and at the same time so little heeded, as is the pollution of the water supply.

Until within the last few years a clear, cool, sparkling supply of water was considered all that could be desired. It appealed to the esthetic sense as well as to the taste, and no suspicion that danger might lurk within it ever entered the mind. With the advance of knowledge made by the microscope in bacteriological science, it was

soon found that the clear sparkling water which had been thought so pure might be laden with deadly germs of typhoid, cholera, or other water-borne diseases; that serious outbreaks of these diseases, causing the death of many of their victims, and costing much in money and more in suffering and loss of time, could be directly traced to this same water supply. The source of this pollution is easily traced to the influence of the drainage of human habitations. The streams were convenient in which to throw all manner of matter that was needless or a nuisance about the place. Closets were built directly over the water or within easy reach thereof. The waste of sawmills and other manufacturing establishments was allowed to flow into the channels of streams, and corrals were built upon their banks. People became accustomed to such use of the streams, and many have come to regard them as made especially for their use, caring or thinking little of the danger they were entailing upon others. As the towns grew and the single closets gave way to the sewer, the polluting matter increased in greater ratio. We had been taught to place our faith in the purifying influence of the earth and that water would purify itself in running a short distance. This is true only in a limited measure, and appearance and taste as guides to pure and wholesome water must be relegated to sparsely inhabited regions. Scientific tests must be applied as the only safety, and all public water supplies should be examined frequently by a competent expert employed by the State. By doing this many epidemics could be stopped early and many lives saved.

The question of preventing the streams from being polluted is one of great difficulty, but one which will have to be met before long. In early times, when inhabitants were few and cities small, there was not the same amount of danger as now, when cities and villages are on every stream. Now the quantity of sewage is such that some streams are contaminated sufficiently to destroy all fish except the scavenger species (which live on decaying matter), and to make the waters unfit for domestic use. In other streams the water may have the appearance of purity and contain little organic matter, but lurking in it are deadly germs, derived from some case of sickness farther up the stream and which, if conditions are favorable, will start an epidemic below. In many States all sources of public water supply and systems for the disposal of sewage are put under the charge of the State health office, and the time is near at hand when some such step will be necessary here, in order to protect the people from the ever-increasing danger of typhoid or other water-borne diseases.

CHEMICAL AND BACTERIOLOGICAL LABORATORY.

There is a law for the appointment of a State Analyst, who shall be a professor in the State University. No provision, however, has been made for help in the department to do this work. The duties of the

professor of chemistry in the University at Berkeley are too great for him to personally attend to the work of State Analyst, and having no funds with which to procure help, it could not be done to any satisfactory degree. A few analyses have been made, but no extensive work could be undertaken. The much needed work of investigating drinking waters, adulterated foods, drugs, oils, etc., had to be entirely neglected. There are being sold many adulterated products which are clearly detrimental to health, and about which the people should be informed. This Board has received numerous letters asking that analyses be made and seeking information in regard to the department. The information we furnished, and the analyses as far as possible.

The streams and lakes of the State have been extensively polluted and many cases of typhoid and other water-borne diseases have resulted. The State has a large extent of mountainous country remote from modern chemical and bacteriological laboratories and without well-organized health authorities. These districts have many villages and mining camps which take their water from the clear streams and too often allow their sewage to return. Should typhoid break out in any of these remote places they have no means of knowing to a certainty its cause, and as a result many lives are lost. The State Board should be able to make the necessary examinations and investigations for them, but this we can not do, on account of lack of funds. It is a matter that should appeal strongly to the members of the Legislature, as many of their constituents yearly suffer from these causes. We would earnestly recommend that an appropriation be made whereby a chemical and bacteriological laboratory can be equipped, and an efficient man employed, under the charge of the State Board of Health. The State has a certain amount of bacteriological apparatus, used in the investigation of plague cases in San Francisco, which could be transferred to such a laboratory, thereby lessening the expense somewhat. Such a laboratory would be of untold benefit to the whole State. Samples of blood from suspected typhoid cases, discharges from sore throats, sputa from consumptives, or other pathological products could be examined at any time at the request of a health officer. Foods and drugs could be examined for adulterations. The public water supplies should be under sanitary control and frequent examinations made. It is doubtful if the State could derive as much good in any other way, for a like expenditure of money.

SANITARY CONFERENCE.

On September 8, 1903, this Board held a meeting in San Francisco, to which it invited all the health and sanitary officers of the State and all others interested in sanitary matters. There was a good attendance, and an organization was formed, which was designated as the State, County, and Municipal Sanitary Conference of California. A second meeting

was held at Paso Robles, on April 18, 1904, which was much more largely attended.

The objects of the conference are to discuss questions relating to public health, to exchange ideas in regard thereto, and to establish throughout the State a concord of action so that there can be some uniformity in the work; in other words, to bring organization out of chaos. At both meetings excellent papers were read and discussed, and there was awakened a general interest which is already bearing fruit.

It is probably not necessary to call to your attention the need of thorough organization in order to win in any contest. The objects of the different health boards are to improve the general health and sanitary conditions of the State, to fight disease in any form, but especially in epidemics, and to investigate and find the causes of disease and destroy them. The work is solely for the health of the people—to save and extend their lives. To do this, organization is needed as much as it is to protect against the possibility of a national foe. We have an excellent militia, and provision is made for its annual encampment, and while the members thereof are seldom called upon for active service we feel the safer and gladly give our support. Disease is constantly confronting us, and each year thousands die that might have lived had an active, well-instructed health board been in existence in every county, city, and village in the State, and all working in harmony. From the State down through county, city, and village, the health authorities should be in touch with one another. Should epidemics break out, every health officer should know it. Every case of contagious disease should be reported, and uniformity of action should exist from one end of the State to the other. Semi-annually all health officers should be obliged to attend the conference, the county or municipality paying the necessary expenses. It would be an encampment of the health officers, which could only result in increased efficiency of the department, and we recommend a law making such attendance obligatory.

VITAL STATISTICS.

The collection of vital statistics is imposed by law upon the State Board of Health, and outside the direct safeguarding of the public health there is no more important duty. Such statistics are not only valuable from which to draw conclusions as to the relation of certain causes to the health of the community, but often they are necessary in the proper settlement of estates. No human remains should find a resting place in California without a complete record being on file in the office of the State Board of Health, and in this office an index of all deaths should be kept so that any one could find the full particulars of any case. Such an index this Board has kept so far as deaths are reported for the past year. The laws, however, in relation to

the collection of these statistics are faulty, and good results under them are impossible. The figures presented are reliable for the population reported, but it embraces only about one half of the State, we having no record whatever of the other half. This Board has adopted the United States standard certificate of death, and has tried to introduce it throughout the State. This certificate is used in most States that are advanced in the collection of vital statistics, and as uniformity is greatly to be desired, should be generally adopted. We would recommend a complete revision of the existing laws, so that the present clumsy, round-about way of making reports could be done away with and all certificates of death sent at once to the office of the State Board of Health.

Every birth should also be recorded. The State should know the name, age, and nationality of all its children. At the present time it is impossible to prove by record the age of many of our native sons and daughters—a condition which is certainly not complimentary to us as a State and may be of serious consequence to them.

We have made no attempt at an elaborate tabulation of vital statistics, their incompleteness precluding our doing so. We present, however, the following table, which shows the number of deaths for the past five years arranged under their respective causes, and also the percentage of deaths caused by each disease mentioned. These for the inhabitants reported are correct, but to try and tabulate by counties or towns would be eminently unjust. Some have sent in faithfully each month an accurate report. Others have reported for a few months, while many have failed to make any report at all. A tabulation would give the faithful few a much larger death-rate than others, and many would not appear. Statistics to be of value must be complete and accurate, otherwise it is better not to publish them. It is greatly to be hoped that the Legislature will, at its coming session, pass laws making it possible for this Board to collect these much needed and valuable statistics.

VITAL STATISTICS.

Number of Deaths during Past Five Fiscal Years, Number Attributed to Different Causes, and Yearly Percentage of Deaths.

Years.	Population.....	Total Deaths.....	Consumption	Pneumonia	Bronchitis	Congestion of Lungs	Cholera Infantum ..	Diseases of Digestive System	Diphtheria and Croup	Scarlet Fever.....	Measles	Smallpox	Whooping-cough....	Typhoid Fever	Remittent and Intermittent Fevers, Typho-Malarial Fever	Cerebro-Spinal Fever	Cancer.....	Heart Disease	Alcoholism.....	Unclassified	Death-rate.....
July 1899 to July 1900..	704,431	11,613	1,941	751	223	74	56	602	169	30	23	9	43	226	30	124	319	972	142	5,879	16.48
July 1900 to July 1901..	546,435	9,474	1,489	845	181	43	49	366	130	23	31	4	53	136	18	130	329	919	111	4,617	17.33
July 1901 to July 1902..	680,041	12,060	1,724	1,103	193	41	68	528	278	27	24	3	20	156	19	92	467	1,183	110	6,024	17.71
July 1902 to July 1903..	755,648	13,437	1,953	1,132	125	33	108	663	345	56	30	5	46	191	23	111	536	1,441	149	6,480	17.78
July 1903 to July 1904..	969,328	15,173	2,345	1,239	198	47	91	941	217	24	54	3	132	244	30	143	666	1,802	163	6,834	15.53

<i>Percentage of Total Deaths Attributed to Each of the Mentioned Causes.</i>																					
July 1899 to July 1900..	704,431	11,613	16.7	6.4	1.9	0.6	0.4	5.1	1.4	0.2	0.2	0.08	0.3	2.9	0.2	1.0	2.7	8.2	1.2	50.6	---
July 1900 to July 1901..	546,435	9,474	15.8	8.9	1.9	0.4	0.5	3.8	1.3	0.2	0.3	0.04	0.5	1.4	0.1	1.3	3.4	9.7	1.1	48.9	---
July 1901 to July 1902..	680,041	12,060	14.2	8.1	1.6	0.3	0.5	4.3	2.3	0.2	0.1	0.02	0.1	1.2	0.1	0.7	3.8	9.8	0.9	41.6	---
July 1902 to July 1903..	755,648	13,437	14.6	8.5	0.8	0.2	0.7	4.3	2.2	0.3	0.1	0.03	0.3	1.3	0.1	0.8	3.9	10.7	1.1	48.2	---
July 1903 to July 1904..	969,328	15,173	15.4	8.1	1.3	0.3	0.5	6.2	1.4	0.1	0.3	0.01	0.8	1.6	0.1	0.9	4.3	11.8	1.7	45.0	---

SANITARY INSPECTION OF STATE BUILDINGS AND INSTITUTIONS.

State University at Berkeley.—Located upon a hillside where perfect drainage and pure air are easily obtained, it is by nature endowed with more of the elements of perfect sanitation than are most of our State institutions. These natural conditions have been duly appreciated, and in all recent improvements nothing has been done but what would improve their value. The water supply for the buildings is from the city mains, while that for irrigation is from a private reservoir. The sewer system is connected with that of the city, and while in some respects imperfect, the great fall makes it effective. There is great need for a students' hospital at the University. Students come from all parts of the State and many of them are obliged to occupy rooms in company with others. In case of sickness, for want of any better place to go they have still to occupy the same quarters, much to the detriment of the sick and to the danger and discomfort of the well. To avoid this the State should make an appropriation for a hospital, to be located on the University grounds and placed in charge of the University authorities, where students could be treated for a small fee.

State Capitol Building.—This building should be the pride of the State in every respect. A noble structure, situated in the finest State capitol park in the United States, its sanitary condition should be the best possible. Far from this, for it is difficult to imagine a more unsanitary condition. It would be impossible to find a public building of any kind in the State which would so quickly bring the blush of shame to the cheek of a loyal Californian. The toilets, old and antiquated, are foul to the extreme—not for want of care on the part of the officials in charge, but on account of the construction being such as to make cleanliness impossible—with the result that the halls are often filled with foul and impure air and some of the offices are unfitted for use. Ample appropriations should be made to put this building in perfect sanitary condition, both for the honor of the State and for the health of its occupants.

Stockton State Hospital.—This is the oldest of the State hospitals, and in its management is surpassed by none. The sanitary conditions are excellent. Being on low ground the drainage is poor, and oftentimes the basements are wet, but thorough ventilation has prevented serious trouble. It is connected with the city sewer, which, however, is too high to drain the basements. The water is pumped from deep wells and is of good quality. Important improvements have been instituted during the past year. A new and very excellent ice plant with cold-storage rooms has been installed, which will prove an expenditure for economy as well as for health. Marked improvement has been made in the female department by putting in dormer windows so as to admit more air and allow

a view from the upper wards. The dairy is in fine shape, the milking-stalls and feeding-troughs being of concrete and kept clean.

Southern California State Hospital.—This hospital is situated on high ground at Patton, San Bernardino County, and overlooks the whole valley. The water supply is threefold—from the Bear Valley North Fork Company's ditch, from a tunnel into the hill, and from a well. The quality is good and the quantity generally sufficient. The sewage is emptied into a double settling-tank and then used for irrigation purposes. There should be installed a septic tank, after which the sewage could be used without danger or offense. The general sanitary conditions are excellent, although the wards are too crowded for safety. The dairy is not what that of a State institution should be. The herd is in good condition, but the buildings and yard are not sanitary and should be improved. The dairies of the State institutions should in every respect be models for the rest of the State. None but the best cows should be kept, and barns, milking-sheds, and appliances should be perfectly sanitary.

Mendocino State Hospital.—The general condition of this institution is good. During the past year the Board of Managers has instituted a sewage-destruction plant. The original plan was, at the suggestion of this Board, modified somewhat in the matter of details. The result is that the sewage, which for years has been a nuisance and a great source of annoyance to the neighborhood, is now entirely destroyed and the waste water, which is perfectly clear, is used for irrigation purposes. The water supply of the hospital is not all that could be wished. Coming from a small stream, which in summer is very low, it has to be confined in a reservoir, and at times gets quite offensive. More commodious reservoirs should be provided, for there is danger that in some dry year the supply will give out and trouble result. The hospital has an excellent herd of cows, but the dairy buildings are not up to date, nor can the milk be kept perfectly sanitary with the present arrangements, and we would recommend an appropriation sufficient for their improvement.

Home for Feeble-Minded Children.—This institution, situated at the foot of the high Sonoma hills, is well located for health and beauty, and we have, so far as location is concerned, a right to expect the healthy condition which exists. The management has done much within the past two years to improve the general sanitary conditions. In the past the sewage has been emptied into the creek, and while it does not materially affect the health conditions at the Home, it pollutes a stream, which should not be done by any one, much less the State. At the present time a septic tank is being built and will be ready for the sewage as soon as the sewer can be completed. This will relieve the stream of contamination and cure a source of danger to all below. The water

supply is good and pure. The plumbing and heating have been in extremely bad condition, but extensive improvements the present year have done much to remove all danger to health from that source. The greatest need of the Home is more room. The play and exercise room for the boys is in the basement, below the level of the ground, and is unfit for such use. Fortunately it does not have to be used during the dry season, as then they are out of doors. Many of the dormitories are too crowded for best results to health and development. The milk supply is not sufficient, nor are the cow stables and surroundings what they should be. The superintendent is anxious to improve the dairy, but the vast amount of other necessary work has thus far prevented the carrying out of plans. The improvements should, however, be provided for, as good, pure milk is particularly necessary for these State charges.

Napa State Hospital.—This is one of the largest hospitals in the State and next to the oldest. There is nothing in its location to regret. Being high, the drainage is perfect, the sewage emptying into tide water. The water supply is from reservoirs on a small creek and from a well. The water from the latter is used for drinking purposes and is of fairly good quality, but is somewhat limited in quantity. As a pure and plentiful water supply is necessary for perfect health, this Board would recommend a further supply. The plumbing of this hospital was old and extremely bad and there was danger of disease resulting from it. The Board of Managers and the State Commission in Lunacy are replumbing the whole institution in a thoroughly up-to-date manner, and we have no hesitation in saying that no State hospital in the country will have a more satisfactory system. The general sanitary condition is good. The dairy is in good shape, the floor of the milking-barn being washed daily, and the milk promptly cooled.

Agnews State Hospital.—This hospital is situated a few miles from San José, in the beautiful Santa Clara Valley. It has an abundant supply of pure water from wells about 700 feet deep. The sewage is carried to tide water in one of the sloughs. This, so far as the health of the institution is concerned, is all right, but is all wrong in principle. The State should destroy the sewage at all its institutions, thereby setting an example for the municipalities. Like those of the other State institutions, the buildings are kept clean and sanitary. The need of new plumbing has been provided for and will soon be installed. The dairy herd is in excellent condition and the buildings clean. The cottage plan of building, which has been adopted at Agnews, is certainly to be commended from a sanitary point of view. With the great aggregation of patients necessary where buildings are large it is impossible that the sanitary conditions can be as perfect as where the wards are smaller and numbers fewer. We heartily recommend this system to all the hospitals.

State Normal School at Chico.—The plumbing is in good condition with the exception of the wooden seats of the water-closets, which are stationary. These should be replaced with the wooden slats on movable hinged seats. In one place we found that where formerly there had been a closet they had dismantled the bowls and in so doing had neglected to seal up the pipe. This was ordered sealed by Dr. C. C. Van Liew, President of the school. The sewage from the building empties into two large cesspools within about 250 feet of the main building. The waste pipe leading to them is thoroughly trapped. We could get no odor either in the building or in the vents of the cesspools. We were told that the cesspools were great places for the propagation of mosquitoes, and we found abundant evidence that such was the case. Oil will be tried in these pools and its effect watched. The buildings should be connected with the city sewer system, but as the school is out of the city limits there is difficulty in doing this at the present time. The water supply is from the city water works and the water is considered good (an analysis of the same is herewith attached). It is obtained from wells some 30 to 35 feet deep and pumped into tanks. The school building is remarkably well built and reflects great credit on those who had the matter in hand, and clearly shows that there was no jobbery in this building. The basement floor, where the heating plant is situated (hot-air system being used), has never been cemented, and we think it would be of great benefit in the way of cleanliness and in keeping out the dampness and the mold that goes with dampness, if this be done. On the whole, the building is in a very satisfactory condition from a sanitary standpoint.

BERKELEY, CAL., July 19, 1904.

General analyses of two well waters; samples sent by F. C. Lusk, Chico, Cal., as representing town supply.

	Well No. 1.	Well No. 2.
	Grains per Gallon.	Grains per Gallon.
Potassium sulfate.....very small }	1.52	1.40
Sodium sulfate (glauber salt), etc..... }	1.69	.33
Sodium chlorid (common salt)..... }	.87	.31
Sodium carbonate (sal soda)..... }	12.82	4.66
Calcium and magnesium carbonates, etc.....chiefly }		
Calcium sulfate (gypsum).....considerable }		
Silica.....large }		
Organic matter.....no "char" }	2.92	1.45
Chemically combined water..... }		
Totals.....	19.82	8.15

GEORGE E. COLBY.

Of these two waters No. 2 is exceptionally pure and adapted to every use, both domestic and agricultural.

The same is true of No. 1, although its contents of solids is somewhat high, rendering it hard: but the mineral ingredients do not indicate any contamination.

E. W. HILGARD.

BERKELEY, CAL., July 19, 1904.

Sanitary analysis of water from well No. 1; sample sent by F. C. Lusk, of Chico, California.

Date.	Mark of Sample.	Grains per Gallon.		Parts per Million.				
		Total Residue.	Chlorin.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Consumed by Moist Combustion.	Nitrates (N ₂ O ₅).	Nitrites.
1904. July 19-----	No. 1.	19.82	1.04	.028	.062	.40	1.54	None.

GEORGE E. COLBY.

This water is in every respect far within the limits of tolerance, and although it is possible that its greater mineral content may originate from some artificial source, as it stands no possible objection can lie against it.

E. W. HILGARD.

State Normal School at San Francisco.—This is one State institution of which from a sanitary standpoint nothing good can be said. The buildings are old and out of date, with some rooms below the level of the street. The ventilation is poor and the light inadequate and badly arranged. The heating facilities are imperfect. Under the existing conditions scholars can not get the best results for the time spent, and unless a new location can be secured and modern buildings erected we would advise that the school be closed.

State Normal School at San José.—Like many of our school buildings, in the construction of this, little regard was shown to light or ventilation of the classrooms. In some of the rooms a rearrangement of the seats might be possible, so that the light would be less strong in the eyes and more on the books of the pupils. The evil will probably have to be endured, but in the future the State should consider more carefully these important points. The water is from a deep well and is good. The sewage runs into the city system. The plumbing is old, but has been well cared for and is in fair condition. Some old-fashioned closets which are not in use should be taken out and the pipes sealed. The wooden, lead-lined sinks should be replaced by porcelain ones. The greatest need of the school is in the basement. The floor is but little above the ground, and underneath it there is an excellent breeding-place and runway for rats, which they are not backward in using. This floor should be removed and one of concrete put in. Rats are a direct menace to health, and no building should be allowed to have a wooden floor near the ground.

State Normal School at San Diego.—This is the most recent of our normal schools, and from a sanitary standpoint the best. The rooms are constructed with regard to light, which makes study less difficult for the pupils. The ventilation is good. The closets are clean, and

being ventilated downward there is an entire absence of odor. The sewage empties into a pit, but being tightly covered gives no offense, and probably acts as a septic tank, destroying all the organic matter.

State Normal School at Los Angeles.—The general sanitary condition is good, having city water and sewerage connections. The heating, however, is not satisfactory, being done mostly by means of stoves, which are expensive and do not properly heat the rooms. A thoroughly up-to-date central heating plant should be installed, from which all the buildings could be heated.

Industrial Home of Mechanical Trades for the Adult Blind.—The Home for the Adult Blind is an institution which seems to have been least blessed with the goods of this world. The buildings are old and the plumbing is very old. The workshops for the males are situated on two floors of an old barn. The sanitary condition is very poor, and the danger from fire is great. The general management of the institution is a very efficient one and should be encouraged in every way.

Institution for the Deaf and the Blind.—This institution, situated at Berkeley, is a model in every way. It is simply above criticism. The dormitories, lavatories, kitchen, laundry, and dairies are about as near perfection as can be gotten. Praise is certainly due to the efficient management.

Folsom State Prison.—The general sanitary condition of this institution is good. The buildings are kept clean, inside and out. The water supply from the American River is pumped into a reservoir and allowed to settle, running from it to other and smaller reservoirs nearer the buildings. These are kept clean, and we see no reason to criticise adversely the system. The sewage is collected in a pit on the river bank, and is then pumped into a reservoir on the hill, from which it is drawn for irrigation purposes. There is a certain amount of leakage from the pit into the river, which should be stopped, so as to entirely prevent pollution of its waters. The reservoir into which it is pumped is not what a State institution should have. Its location near the water reservoir, although on a lower level, is unfortunate. Instead of a reservoir there should be a scientifically constructed septic tank, in which the organic matter of the sewage could be destroyed. The water could be saved and used for irrigation, the same as at present, and the certain amount of existing danger of poisoning from its use be removed. The dairy, although not by any means perfect, is fairly good, and there is an effort on the part of those in authority to make it as sanitary as possible. A new and up-to-date milking-shed with a cooling-room should be built.

San Quentin State Prison.—The San Quentin Prison was found to be in very bad sanitary condition. The accommodations are too small for the number of prisoners sent there. Cells 25 by 22 feet, and about 9

feet high are occupied by thirty-six inmates, contrary to all cubic-air laws. The prison is overcrowded everywhere, and it is only a question of time before some epidemic will break out there. The hospital is in the same condition—dirty and antiquated. No provision is made for the segregation of tuberculous patients, because of lack of room. The plumbing is primitive and rotten from age, having been put in thirty or forty years ago. The culinary department is situated virtually underground. The ventilation is poor and the walls are unclean. Meats become foul rapidly, for the reason that there are no refrigerators. The milk supply is brought from outside dairies and is generally poor. The bathing facilities for the prisoners are inadequate, and they are not even allowed a towel for drying purposes. We recommend enlargement of the premises, and a general sanitary overhauling of the various departments. San Quentin Prison is the poorest equipped State institution that we have visited. Warden Tompkins is handicapped in every way in making improvements by reason of lack of funds.

Preston School of Industry.—This institution is situated on high ground overlooking the town of Ione, and has an ideal location from a sanitary point of view. The buildings are clean and well kept, and the health of the boys is excellent. The water supply is twofold—that for drinking purposes is from a spring, and is excellent; that for general use is unlimited in quantity, but coming from a mining country is filled with earthy matter. A settling reservoir is being built, which it is hoped will remove this trouble. The disposal of the sewage is positively bad. It is carried into the ditch which conducts away the waste water, and flows through the ranch and is used when needed for irrigation. The boys in their work frequent the banks of this ditch and are liable to become poisoned. A septic tank should be put in. This could be constructed largely by the inmates. Situated in the foothills, where the temperature for a few months is quite high, an ample ice supply is needed, both for comfort and for economy. There are often fruit, meat, and vegetables that could be kept for another day if a proper ice supply existed, which without it are lost. This saving during the summer would be considerable. We recommend an appropriation for a septic tank and an ice plant.

Veterans' Home at Yountville.—The sanitary condition of this institution is excellent. Situated on high ground, with good drainage and pure water, the natural conditions are nearly perfect, and the management has ever kept a close watch on the artificial. The new hospital in its arrangements and management is perfect. The consumptives are segregated and every care used to prevent the well from being contaminated. The dairy buildings are in good condition, inside and out, all refuse being cleared away each day. The disposition of the sewage

is not all that could be desired, but does not affect the health conditions of the institution.

Whittier State School.—The greatest need the school has is a complete change in the plumbing of the boys' three large dormitories, which are located in the second and third stories of the main buildings. Each dormitory contains fifty boys, and there has been a continual overflow in the upper closets, which have flooded the two floors and caused repeated damage to the ceilings in the superintendent's quarters and even in the lower bathroom adjoining the parlor. These closets, which are all one over the other on the inside of the south front, should be taken out of the building and put on the inside of the hollow square immediately across the wing and entirely outside the building. Fortunately there is room over the porch for these closets to be put entirely outside the building and even more convenient to the dormitories than they are at the present time. We recommend, from a sanitary standpoint, the expenditure necessary, which is estimated to be about \$5,000. There is a very defective ventilation of these dormitories, which can be remedied by large central ventilators connecting with the outside air. At the present time ventilation is by means of windows on two sides, which is not sufficient in weather demanding a partial closing of the windows. An economical expenditure would be for an ice machine, which would permit the keeping of meats and other provisions in much better condition, and these could then be purchased in larger quantities at lower prices; therefore, we would recommend that a good ice plant be added to this institution. There was no ice on the day of this inspection and their meat was in bad condition. The trade school and buildings, and the school as a whole, are in excellent condition. The basement, where the baking and cooking are done, needs some repairs, but if the meat question was satisfactorily settled by the adding of a cooling-room and ice plant, a great deal of the annoyance of that department would be remedied. The expenditures that we recommend would cost somewhere between \$8,000 and \$10,000, which in the end would be a sufficient economy to justify it.

Respectfully submitted.

DR. MARTIN REGENSBURGER, President,
DR. F. K. AINSWORTH,
DR. W. A. BRIGGS,
DR. W. LE MOYNE WILLS,
DR. A. C. HART,
DR. O. STANSBURY,
DR. N. K. FOSTER, Secretary,

State Board of Health.

FINANCIAL STATEMENT.

FUND FOR TRAVELING AND CONTINGENT EXPENSES.

Statement showing Condition of Appropriations for Traveling and Contingent Expenses of State Board of Health for Fifty-fourth and Fifty-fifth Fiscal Years.

FIFTY-FOURTH FISCAL YEAR.

By amount appropriated..... \$1,500 00
By balance, etc. 6 90

\$1,506 90

To warrants drawn in favor of State Board of Health, as follows:

No. Date—1902.	Amount.
295—July 19.....	\$189 90
1284—Aug. 18.....	18 00
1309—Aug. 23.....	70 45
2350—Sept. 27.....	22 00
3587—Nov. 1.....	65 70
3889—Nov. 6.....	35 80
4001—Nov. 13.....	31 70
4566—Nov. 29.....	80 50
4810—Dec. 2.....	17 21
1903.	
6886—Jan. 15.....	52 15
8467—Jan. 27.....	27 10
8468—Jan. 27.....	46 25
11852—Feb. 19.....	50 80
14392—Mar. 7.....	7 50
15380—Mar. 18.....	31 54
16103—April 2.....	145 95
16316—April 10.....	33 25
17471—May 21.....	57 29
17537—May 26.....	27 75
2—July 1*.....	483 73
235—July 1*.....	12 43

\$1,506 90

FIFTY-FIFTH FISCAL YEAR.

By amount appropriated \$1,500 00

To warrants drawn in favor of State Board of Health, as follows:

No. Date—1903.	Amount.
612—July 18.....	\$51 60
1103—Aug. 1.....	95 80
1691—Aug. 24.....	10 70
2332—Sept. 3.....	6 50
3414—Oct. 3.....	61 55
3708—Oct. 21.....	29 75
3763—Oct. 27.....	7 35
4449—Nov. 4.....	29 29
4703—Nov. 12.....	7 50
4951—Nov. 28.....	7 69
5702—Dec. 8.....	65 40
5881—Dec. 18.....	11 50
6044—Dec. 29.....	7 50
6545—Dec. 31.....	9 50
1904.	
6743—Jan. 12.....	21 70
7043—Jan. 20.....	15 00
7448—Feb. 1.....	74 40
7942—Feb. 9.....	6 06
8073—Feb. 16.....	5 00
8763—Mar. 4.....	6 25
8985—Mar. 15.....	9 25
9661—April 1.....	10 04
9776—April 7.....	12 00
9868—April 12.....	19 00
9934—April 18.....	8 66
10000—April 25.....	25 05
10686—May 3.....	31 40
10802—May 6.....	27 85
10851—May 10.....	9 50
10968—May 18.....	10 50
10973—May 18.....	157 25
11008—May 24.....	34 05
11031—May 26.....	5 75
11874—June 14.....	88 75
12082—June 25.....	9 75
To balance.....	511 16

\$1,500 00

*Contracted in fifty-fourth fiscal year and paid in fifty-fifth fiscal year from funds of the fifty-fourth fiscal year.

CONTAGIOUS DISEASE FUND.

Statement showing Condition of Appropriations for Prevention of Contagious Diseases.

APPROPRIATION OF FEB. 19, 1901.		APPROPRIATION OF MAR. 20, 1903.	
By amount appropriated -----		By amount appropriated -----	
	\$100,000 00		\$100,000 00
Amount on hand July 1, 1902...	\$73,142 48	To warrants drawn up to July 1, 1904, as follows:	
Amount returned to Treasurer on account of error-----	68 10	No. Date—1903.	Amount.
	<u>\$73,210 58</u>	16763—April 30.....	\$1,207 93
To warrants drawn, as follows:		17826—May 29.....	1,596 07
No. Date—1902.	Amount.	3—July 1.....	1,120 00
354—July 21.....	\$769 50	456—July 10.....	5 00
1136—Aug. 8.....	639 80	613—July 18.....	90 00
2078—Sept. 8.....	598 15	1561—Aug. 11.....	1,278 85
2872—Oct. 2.....	677 63	1692—Aug. 24.....	22 40
3900—Nov. 7.....	1,193 45	1806—Aug. 27.....	35 90
4565—Nov. 29.....	129 45	2331—Sept. 3.....	1,155 80
4967—Dec. 6.....	1,135 00	2701—Sept. 22.....	27 50
5171—Dec. 22.....	177 70	3104—Sept. 30.....	1,155 00
1903.		3811—Oct. 31.....	1,165 00
5692—Jan. 2.....	1,266 85	4667—Nov. 11.....	38 50
11296—Feb. 21.....	349 00	2846—Nov. 20.....	19 70
14393—Mar. 7.....	1,015 62	5581—Dec. 4.....	1,193 50
15381—Mar. 18.....	242 30	6045—Dec. 29.....	1,165 00
15501—Mar. 25.....	450 00	1904.	
15502—Mar. 25.....	962 35	6744—Jan. 12.....	82 50
Act repealed March 25, 1903.		7597—Feb. 2.....	1,239 84
To balance returned to Treasurer -----	63,603 78	8139—Feb. 20.....	17 50
	<u>\$73,210 58</u>	8525—Feb. 29.....	1,225 50
		8864—Mar. 8.....	6 65
		9008—Mar. 15.....	15 30
		9044—Mar. 22.....	40 00
		9660—April 1.....	1,044 50
		9964—April 18.....	341 70
		10418—April 30.....	1,015 00
		10892—May 12.....	42 70
		11336—May 31.....	1,015 00
		11948—June 21.....	82 95
		12119—June 30.....	1,020 00
		To balance-----	81,534 71
			<u>\$100,000 00</u>

PRINTING FUND.

Statement showing Amount of Printing done for State Board of Health during the Fifty-fourth Fiscal Year.

By appropriation for fifty-fourth fiscal year		\$700 00
By balance from fifty-third fiscal year		138 50
Total		\$838 50
1902—Aug. 9— 150 monthly circulars	\$11 50	
Sept. 4— 150 monthly circulars	11 00	
Nov. 13— 150 monthly circulars	11 00	
Nov. 15— 150 monthly circulars	11 00	
Nov. 19—1,000 registers of marriages	20 75	
Nov. 19—1,000 registers of births	20 75	
Nov. 19—1,000 registers of deaths	20 00	
Dec. 1— 150 monthly circulars	14 00	
Dec. 30— 150 monthly circulars	12 00	
1903—Jan. 31—2,000 biennial reports	500 00	
Mar. 11— 150 monthly circulars	11 50	
Mar. 12— 150 monthly circulars	11 00	
Mar. 27— 150 monthly circulars	10 00	
Apr. 9— 100 circular letters to boards of health	3 50	
Apr. 10—1,000 envelopes, No. 6	4 25	
Apr. 10— 500 letter heads	3 50	
Apr. 12—2,000 memo. heads	6 25	
Apr. 12—3,000 letter heads, in pads of 500	15 50	
Apr. 12—1,750 envelopes, No. 6, in lots of 250	10 50	
Apr. 12— 300 circular letters to boards of health	3 25	
May 1— 300 monthly circulars	15 50	
May 2— 500 manila envelopes	5 00	
May 21— 250 monthly circulars	16 50	
June 1—5,000 envelopes, No. 6	15 00	
June 27—2,500 envelopes, No. 6	8 00	
June 30— 300 monthly circulars	15 00	
June 30—4,000 letter heads, typewriter	13 00	
June 30—2,000 memo. heads, typewriter	6 00	
June 30—1,000 reports of deaths	7 25	
June 30—2,000 manila envelopes	20 00	
	\$832 50	
Balance returned to Treasurer	6 00	
	\$838 50	

Statement showing Amount of Printing done for State Board of Health during Fifty-fifth Fiscal Year.

By appropriation for fifty-fifth fiscal year		\$750 00
1903—July 22— 250 monthly circulars	\$12 00	
Aug. 5— 1,000 blank sheets	1 00	
Aug. 20— 200 monthly circulars	13 50	
Sept. 22— 200 monthly circulars	18 25	
Oct. 15—10,000 marriage report blanks	26 25	
Oct. 16—15,000 records of births	37 00	
Oct. 22— 250 monthly circulars	18 50	
Oct. 27— 1,500 reports of deaths	21 50	
Oct. 27— 1,500 reports of births	21 50	
Oct. 27— 1,500 reports of marriages	21 50	
Oct. 29—20,000 certificates of deaths	52 75	
Nov. 7— 1,000 letter heads, typewriter	6 00	
Nov. 23— 250 monthly reports	20 75	
Dec. 18— 250 monthly reports	18 00	
1904—Jan. 25— 250 monthly reports	16 50	
Feb. 15— 1,500 blanks—vital statistics	17 50	
Feb. 17— 300 monthly reports	15 75	
Mar. 19— 300 monthly reports	16 00	
April 12— 150 programs of sanitary conference	6 00	
April 20— 300 monthly reports	17 25	
May 17— 300 monthly reports	17 75	
May 26— 250 envelopes, No. 6½	2 00	
June 22— 300 monthly reports	15 50	
	\$412 75	
Balance	337 25	
	\$750 00	

BIENNIAL REPORT

OF THE

STATE BOARD OF PRISON DIRECTORS

OF THE

STATE OF CALIFORNIA

FOR THE

FIFTY-FOURTH AND FIFTY-FIFTH FISCAL YEARS.

1902—1903 AND 1903—1904.



SACRAMENTO:

W. W. SHANNON, : : : : SUPERINTENDENT STATE PRINTING.
1905.

STATE BOARD OF PRISON DIRECTORS.

R. M. FITZGERALD, PRESIDENT,	- - - - -	Oakland
DON RAY,	- - - - -	Galt
ROBERT T. DEVLIN,	- - - - -	Sacramento
C. N. FELTON,	- - - - -	Menlo Park
JAMES H. WILKINS,	- - - - -	San Rafael

OFFICERS OF SAN QUENTIN PRISON.

J. W. TOMPKINS,	- - - - -	Warden
JAMES M. OLIVER,	- - - - -	Clerk
JAMES RUSSELL,	- - - - -	Captain of the Guard
H. HARRISON,	- - - - -	Captain of the Yard
BURT H. SWAN,*	- - - - -	Turnkey
P. F. CASEY,	- - - - -	Resident Physician
A. DRAHMS,	- - - - -	Chaplain

OFFICERS OF FOLSOM PRISON.

ARCHIBALD YELL,	- - - - -	Warden
BRAINARD F. SMITH,	- - - - -	Clerk
J. G. McDONOUGH,	- - - - -	General Overseer
CHARLES F. GLADDING,	- - - - -	Physician

* Deceased.

BIENNIAL REPORT

OF THE

STATE BOARD OF PRISON DIRECTORS.

To *His Excellency*, GEORGE C. PARDEE, *Governor of the State of California*:

SIR: We, the State Board of Prison Directors, herewith submit the biennial reports of the Wardens and other officers of the respective prisons under our charge, together with our own report, in compliance with the statute.

The reports of the various officers transmitted show in detail the management of the prisons, the classification of the prisoners, the cost of maintenance, and other information of a like character.

We desire, first of all, to call your attention to the financial condition of the State Prison at San Quentin. As you know, the State is engaged in the manufacture of jute bags, which are sold under a law of the Legislature limiting the Board in its action, providing that the bags may be sold only at a limited profit and in certain quantities to actual consumers. The appropriations made by the Legislature are based upon the idea that the State Prison at San Quentin will be able to earn, by the sale of bags, a certain sum of money, which, with the appropriation by the Legislature, will be ample for all purposes. This is, of course, on the assumption that the bags will be sold in due course at a price that will result in profit to the prison. During the last season, owing to the unexpected shortage in crops, the bags were not sold as anticipated, and hence the money expected to be realized therefrom did not come into the treasury. A large deficiency stared us in the face. Therefore, we passed a resolution stating the facts and requesting the State Board of Examiners to allow a deficiency to be created, believing at that time that it would be necessary to secure money for the running of the prison until the meeting of the Legislature; but we are happy to say that it was not necessary to avail ourselves of this remedy. We made strenuous efforts to sell the bags, and have succeeded in selling all at present on hand at a price slightly in excess of cost. So, at the present time, there is in the State Treasury sufficient money to run the

State Prison at San Quentin until the meeting of the Legislature, and possibly until the month of April. But the experience through which we have just gone emphasizes the necessity of making some other provision for the support of the State Prison at San Quentin.

In the first place, the State should make a sufficient appropriation to pay the expenses of the State Prison at San Quentin independently of any sum that may be realized from the sale of bags, whatever sum may be realized from such source to be paid into the State Treasury. It is impossible to foretell what profit can be made on bags or what demand there will be for them; but by making a suitable appropriation for the current expenses of the prison, all the obligations of the prison can be met and the State will be no loser, for the reason that whatever profit may be derived from the sale of the bags will be paid into the State Treasury. The law under which we operate, and which restricts our action, should be modified to the extent of allowing us a wider discretion. While no doubt the object of the law is good, yet, unless there is a lively demand for bags, it ties the hands of the Board so completely that great loss may result to the State. We recommend that the law either be repealed and a limited discretion be given to the Board, or, if this be not deemed advisable, that the law be so amended as to take off the limit in regard to the number of bags that the Board may sell and allow the Board to sell, after a period to be fixed, bags to such persons as it chooses, whether they be consumers or not; giving the preference, of course, in all cases, to the farmers, and only selling to others when the necessity therefor may arise.

Owing to the increase of wages throughout the United States, we find it extremely difficult to secure guards at the wages now paid, to wit: \$50 per month, including their board and lodging. The duties required of a guard are of a responsible character, and we think the salary should be raised to a sufficient amount to secure suitable men to fill these places.

Owing to the fact that a certain fixed sum is allowed for the payment of the salaries of clerks and other employés, we are compelled to have a large amount of clerical labor done by convicts. Convicts have access to the books of the prisons, know the contents of every telegram sent out or received, and have the possibility, if they so desire, of manipulating the books to their advantage. The system is not one that can be commended. Sufficient appropriation should be made at the next session of the Legislature to enable the Prison Directors to employ the necessary number of free men to do all clerical work required at the prisons.

Plans had finally been agreed upon for the construction of a building, at the State Prison at Folsom, for the care of insane convicts, and construction work was about to commence, when it was discovered that

under the wording of the Act creating the appropriation therefor, we could not do the work by convict labor, but must let it out by contract. This would so very materially increase its cost that work has been deferred to enable the Legislature to remedy the defect in the Act. While the appropriation made at the last session of the Legislature may not be sufficient to enable us to erect a building such as we believe the needs of these unfortunate people require, we have concluded that under no circumstances will we exceed this amount, but will erect such a building as the amount allotted to us will allow.

Under the contract made between the State and the Folsom Water Power Company it has always been believed and contended by the State Board of Prison Directors that the State has the exclusive right to the first fall of the water provided in that contract, and has the right to have the water flow through its water gates during the whole period of the twenty-four hours, if so desired. This claim is disputed by the Folsom Water Power Company, who claim the right to shut off the gates when they please and to give the State only such water as may suit the purposes of the company. These conflicting claims have been made the basis of a lawsuit now pending in our courts, but not yet finally decided.

At the last session of the Legislature an appropriation was made for the purchase of an air-compressor at Folsom, but after consultation with Mr. Eckert, our consulting engineer at Folsom, we deemed it inadvisable to provide for the installation of this compressor, owing to the fact that our wheels do not give us the necessary power; therefore, before this compressor can be used to advantage, new machinery will have to be installed at Folsom Prison.

The rock-crusher at Folsom is working to its full capacity, and there is quite a brisk demand for rock. The receipts from this source are shown in the accompanying reports of the Warden and Clerk of that Prison.

In California, prisons are conducted under what is known as the congregate system, and nearly all the evils under which our prisoners suffer are traceable to this system of prison management. It is undoubtedly cheaper to have all the prisoners eat in one dining-room and work in one common factory, but the fact that they communicate with one another and can form friendships and enmities is productive of much mischief. At San Quentin we have very nearly fifteen hundred convicts and only six hundred cells, necessitating the placing of five and six convicts in one cell, and, in one instance, forty-five in one of the larger rooms. It is imperative that new buildings should be erected at San Quentin for the accommodation of convicts there incarcerated. No prison system can be complete unless it provides for segregation of convicts into classes. Every person who breaks a law of the State is

received at the State Prison as a convict, but the character of the man who commits the crime and the character of the offense committed should be governing qualities in determining with whom he should associate. There should be three and probably five different classes of the persons placed in such institutions. A young man who, under the influence of liquor, has committed some crime, scarcely realizing the enormity of his offense, should not be placed in contact with hardened criminals. The habitual lawbreakers should form a class by themselves so they might not contaminate those who had not become addicted to a life of crime. We also have a certain percentage of incorrigibles who defy all laws of God or man and who should be put in a class by themselves. Other distinctions might be made between short-termers and long-termers; but under our present system it is impossible to carry any such classification into effect, as we have not the room or the facilities necessary.

Another serious question is, what shall become of the convicts after they are discharged? Under our present law they are given a small sum of money and a suit of clothes and transportation to the place from which they came; but unless they know a trade or had some means of earning a livelihood before they entered prison their sojourn therein does not fit them for earning a livelihood after they leave its walls. This is a serious subject requiring much attention, but we believe and recommend that some provision should be made in a limited way at least for employment for discharged convicts.

The laws of the State confer upon the Board of Prison Directors the power to parole prisoners. We have adopted a set of rules for our guidance and have attempted to use the power vested in us for the promotion of discipline. We only parole prisoners after we are satisfied that they will secure employment and will lead honorable lives upon their release. We are pleased to say that in most instances the prisoners paroled by us have complied in every respect with their parole. Those who have not, have been apprehended and their paroles revoked. Even when they have gone to distant States we have had them arrested and brought back for the sake of example, so that all may know that the regulations laid down for paroled prisoners must be faithfully observed.

The question as to the nature and degree of punishment for prisoners who break the rules is one of serious import. Without proper punishment of those who commit infractions of prison rules there can be no order or discipline. A prisoner who obeys prison rules—and they are not onerous—will go through his term of imprisonment without suffering the slightest degree of punishment; but we have a percentage in each prison who have no respect for authority and can only be made to work and observe the rules of the prison by vigorous punishment. The

directions of the Board to the officers of the prison are, that while they may use punishment in proper cases, they must not be unduly cruel or severe, and must not use any punishment that will produce a permanent injury to the prisoner. The punishment is under the charge of the physician, who at all times is to see that no injury is inflicted, and who is directed, and has the power, at any time when in his judgment he thinks it proper, to order the punishment to cease. It must be remembered that all forms of punishment have a certain amount of cruelty in them or they would not be punishment; but it is the design of the Board that whatever punishment is inflicted should not be unnecessarily cruel, and the Board has given the most positive directions on this subject to the Wardens.

Both of our prisons in California are practically only large county jails for the keeping of prisoners. This has been due to the fact that in early days it was thought to be the chief aim of a prison to restrain prisoners of their liberty for a time; but in our day a broader view is taken and it is considered to be the duty of the State not only to punish for crime, but to see that a prisoner, while he is such, performs a certain amount of labor for the State. He must be taught habits of discipline, kept under control, and in some respects cured of his evil tendencies. But to secure all these results, worthy as they are, it would be, as we have above suggested, necessary to reconstruct our prison buildings. There can be no question but that better results along this line could be secured by segregating the prisoners into many classes, but this, of course, would entail additional cost for the maintenance of the prisons.

There are many other features connected with prison management to which we have given attention, but which would require a complete change in our prison system to inaugurate and successfully carry into execution. The indeterminate sentence, by which convicts are sent to prison not for a fixed period, but to be released when, in the judgment of the prison officials, the law has been vindicated and they have shown evidence of a desire to lead an honorable life, has very many points in its favor. Such a system, however, would have to be safeguarded by keeping an accurate account with each prisoner so that his release should not depend upon the whim or caprice of officers, but should be determined without fear or favor.

The only industry carried on at San Quentin is that of making jute bags, and to carry on this industry successfully it is necessary to have a large number of convicts employed. To effect a practical segregation of convicts into classes, the mill would have to be adjusted so that there would be no communication between the convicts, and if this be impracticable, other means of employment would have to be found.

In some of the Eastern States provision is made by law for finding employment for discharged convicts, and in some States legislative aid

is given to private societies working in this field of endeavor. Under the laws of this State, as they now exist, we give a convict \$5 in money, a suit of clothes, and a ticket to the place from which he came. He is then a free man, and the State takes no further interest in his welfare. How far the State should interest itself in his condition after his release is a question deserving of serious consideration. We have, however, conscientiously endeavored to do the best we could in the way of securing reformation among prisoners and rewarding those who have worked diligently and faithfully and shown a desire to separate themselves from the criminal classes by the granting of many privileges, and, in proper cases, by the granting of a parole. We are, however, sensible of the fact that many of the reforms which we might initiate are impracticable under present conditions, but we are compelled to accept these conditions as we find them until the Legislature, in its wisdom, shall see fit to change them.

Respectfully submitted.

R. M. FITZGERALD,
DON RAY,
ROBT. T. DEVLIN,
C. N. FELTON,
JAMES H. WILKINS,
State Board of Prison Directors.

REPORT OF THE WARDEN

OF THE

STATE PRISON AT SAN QUENTIN, CALIFORNIA.

FOR THE YEAR ENDING JUNE 30, 1903.

WARDEN'S REPORT.

To the Honorable the State Board of Prison Directors:

GENTLEMEN: I have the honor to submit herewith my annual and final report as Warden, covering the fifty-fourth fiscal year, ending June 30, 1903, including the report of the Clerk showing the financial transactions of the institution during said year and its financial condition at the close of the year.

You will also find herewith the reports of the Captain of the Yard, the Turnkey, the Resident Physician, and the Chaplain and Librarian, as well as a detailed statement of what has been accomplished in the Jute Department during the year, as follows:

OPERATIONS OF THE JUTE MILL FOR THE FISCAL YEAR ENDING JUNE 30, 1903.

WORKINGS OF THE JUTE MILL FOR THE FISCAL YEAR ENDING JUNE 30, 1903.

Net amount of raw jute used	3,737,550 lbs.
Net amount of goods manufactured	3,631,289 lbs.
Loss in manufacture	106,261 lbs.
Or 2.85%.	
Raw jute on hand June 30, 1903	7,134 bales = 2,853,600 lbs.

COST OF PRODUCT.

45-inch burlap	3.77 cents per yard.
22 x 36-inch grain bags	4.45 cents per bag.

OPERATING EXPENSES AND REVENUE.

Net operating expenses	\$193,437 09
Net value of goods sold	252,211 99
Net profit for the year	57,488 04

COMPARISON WITH PREVIOUS YEAR.

Increase in profit—1903	\$57,488 04
1902	56,207 36
	\$1,280 68
Increase in operating expenses, accounted for by higher price of raw jute—1903	\$193,437 04
1902	187,094 36
	\$6,342 82
Increase in production—1903	4,526,200 bags.
1902	4,325,400 bags.
	200,800 bags.

(The jute mill was shut down for sixteen days during the month of December, 1902, and January, 1903, for general repairs.)

INVENTORY OF MATERIAL AND SUPPLIES, JUNE 30, 1903.

RAW JUTE.

7,022 bales in warehouse.	
112 bales in mill.	
7,134 bales, at 400 lbs. each, equals 2,853,600 lbs., at \$3.25 $\frac{1}{4}$ per cwt.....	\$92,813 34

RAW JUTE IN PROCESS OF MANUFACTURE.

16,000 lbs., batched.	
3,000 lbs., carded.	
5,870 lbs., drawing.	
19,620 lbs., roving.	
1,000 lbs., in waste.	
4,633 lbs., in burlap on looms.	
40 lbs., in twine.	
2,362 lbs., in yarn.	
11,906 lbs., in cops.	
10,785 lbs., in spools.	
25,805 lbs., in warp.	
101,021 lbs.....	3,756 61

MANUFACTURED STOCK.

138,454 hemmed bags	\$5,498 35
56 yds. 32-inch burlap	3 52
2,500 imperfect bags	104 50
1,376 lbs. 3-ply twine	56 02
1,804 lbs. 8-ply twine	74 91
880 lbs. waste twine	15 84
	5,753 14

STOCK.

Coal	\$804 20
Jute oil	254 25
Machine oil and engine supplies	94 91
Manila baling rope	104 00
Material for tools and repairs	6,123 85
Sizing material	64 50
Miscellaneous	12 76
	7,458 47
Stock in machine shop	\$2,394 25
Stock in tin shop	125 79
Stock in carpenter shop	1,007 98
Stock in foundry	386 52
	3,914 54
Total	\$113,696 10

EXPENSES OF PRODUCTION, AND COST PRICE OF MANUFACTURED GOODS
FOR THE YEAR ENDING JUNE 30, 1903.

SPINNING AND WEAVING EXPENSES.

Coal	\$4,959 49
Jute oil	3,841 66
Sizing	1,713 59
Baling rope	8 00
Machine oil and engine supplies	928 46
Tools and repairs	13,065 42
Salaries	32,725 58
Water	828 72
Electric power	10,800 00
Miscellaneous	675 55
	\$69,546 47
Less expense incurred in sewing of bags and repairing sewing machines, estimated at 5 per cent.....	3,477 32
Net expense of spinning and weaving 4,966,300 yards of cloth.....	\$66,069 15
Or 1.39 cents per yard.	

SEWING EXPENSES.

Percentage of expense, as above.....	\$3,477 32
78,560 lbs. jute twine, at 3.7 cents.....	2,906 72
Total expenses sewing 4,526,700 bags.....	\$6,384 04
Or 0.145 cent per bag.	

BALING EXPENSES.

4½ yds. 45-inch burlap, at 3.77 cents per yard.....	16.97 cents.
4.82 oz. twine, at 3.70 cents per ounce.....	1.12 cents.
3 lbs. jute rope, at 3.25 cents per pound.....	9.76 cents.
Total per bale.....	27.85 cents.
Or 0.0557 cent per bag.	

SHIPPING EXPENSES.

Drayage, credited to Stock Department.....	5 cents.
Freight, steamer to San Francisco.....	50 cents.
Total per bale.....	55 cents.
Or 0.11 cent per bag.	

COST PRICE OF 45-INCH BURLAP.

11.20 oz. jute, at 3.25 cents per pound.....	2.28 cents.
2.85% loss.....	0.10 cent.
Expense of spinning and weaving.....	1.39 cents.
Cost per yard.....	3.77 cents.

COST PRICE OF 22x36 GRAIN BAGS.

39½ inches of 45-inch burlap, at 3.77 cents.....	4.137 cents.
Expense of sewing.....	0.145 cent.
Expense of baling.....	0.056 cent.
Expense of shipping.....	0.11 cent.
Cost per bag.....	4.448 cents.

MANUFACTURING STATEMENT OF JUTE DEPARTMENT FOR THE FISCAL
YEAR ENDING JUNE 30, 1903.

Raw jute on hand July 1, 1902.....	6,533 bales.
Received during year.....	9,989 bales.
Total number of bales handled.....	16,522 bales.
Less amount on hand July 1, 1903.....	7,134 bales.
Used.....	9,388 bales.
9,388 bales, at 400 lbs. per bale.....	3,755,200 lbs.
Deduct increase of raw jute in process of manufacture June 30, 1903.....	101,021 lbs.
Over amount on July 1, 1902.....	83,371 lbs.
	17,650 lbs.
Total amount raw jute used.....	3,737,550 lbs.

GOODS MANUFACTURED.

51,191 cuts of 45-inch burlap, at 98.18% equals 5,026,002 yards, at 11.20 oz.....	3,518,201 lbs.
916 yards of 32-inch burlap.....	910 lbs.
3-ply twine sold and on hand.....	7,527 lbs.
8-ply twine sold and on hand.....	4,976 lbs.
Waste twine sold and on hand.....	5,949 lbs.
Waste jute sold.....	12,380 lbs.
Twine used in sewing 4,526,700 bags.....	78,560 lbs.
Twine used in baling 9,061 bales.....	2,786 lbs.
	3,631,289 lbs.
Loss in manufacture of 3,737,550 lbs.....	106,261 lbs.
Equal to 2.85%.	

OPERATING COST OF JUTE MILL FOR THE YEAR ENDING JUNE 30, 1903.

Total expense incurred, including value of supplies on hand—		
Raw jute	\$213,030 82	
Raw jute in process of manufacture	3,036 75	
Coal	5,763 69	
Jute oil	4,095 91	
Sizing material	1,778 09	
Baling rope	112 00	
Machine oil and engine supplies	1,023 37	
Tools and repairs	23,103 81	
Salaries	32,725 58	
Water	828 72	
Electric power	10,800 00	
Freight on manufactured goods	4,393 00	
Miscellaneous	688 31	
		<u>\$301,280 05</u>
Less value of supplies on hand June 30, 1903, per inventory—		
Raw jute	\$92,813 34	
Raw jute in process of manufacture	3,756 61	
Coal	804 20	
Jute oil	254 25	
Sizing material	64 50	
Baling rope	104 00	
Machine oil and engine supplies	94 91	
Tools and repairs	10,038 39	
Miscellaneous	12 76	
		<u>107,942 96</u>
Net operating expenses for year		<u>\$193,437 09</u>
Value of raw jute used	\$120,217 48	
Deduct increase in value of raw jute in process of manufacture	719 86	
	<u>\$119,497 62</u>	
Expense of spinning and weaving	69,546 47	
Freight on manufactured goods	4,393 00	
		<u>\$193,437 09</u>

MANUFACTURED GOODS SOLD DURING THE YEAR ENDING JUNE 30, 1903.

869,150 22 x 36 grain bags sold in advance of manufacture prior to July 1, 1902			\$48,237 83
4,162,870 22 x 36 grain bags	@ 5.55c.	\$231,039 29	
6,151 lbs. 3-ply twine	7.00c.	430 57	
3,172 lbs. 8-ply twine	5.50c.	172 42	
3,401 lbs. waste twine	1.50c.	51 00	
1,708 lbs. waste twine	2.00c.	34 07	
Lot loom waste		28 05	
Burlap sold to various individuals and departments		199 00	
Jute products to other departments		92 67	
			<u>232,047 17</u>
			<u>\$280,285 00</u>
Less value of 505,820 22 x 36 grain bags, sold in advance of manufacture prior to June 30, 1903, @ 5.55c.			28,073 01
Net sales for the year			<u>\$252,211 99</u>

PROFIT AND LOSS ACCOUNT.

Sales of manufactured goods.....	\$252,211 99	
Value of manufactured goods on hand June 30, 1903, at cost price, per inventory	5,753 14	\$257,965 13
Deduct—		
Net operating expenses	\$193,437 09	
Value of manufactured goods on hand July 1, 1902, at cost price, per inventory	7,040 00	200,477 09
Net profit for the year		<u>\$57,488 04</u>

GRAIN BAG STATEMENT FOR THE FISCAL YEAR ENDING JUNE 30, 1903.

Bags baled	4,526,200
Bags sold prior to July 1, 1902	869,150
Bags sold during the year	<u>4,162,870</u>
	5,032,020
Less amount of bags sold in advance of manufacture prior to June 30, 1903	<u>505,820</u>
	<u>4,526,200</u>
Bags on hand July 1, 1902	783,500
Bags baled during the year	4,526,200
Bags baled during the year (imperfect)	<u>500</u>
	5,310,200
Bags shipped during the year	<u>3,747,200</u>
Bags on hand June 30, 1903	<u>1,563,000</u>

(Signed:) W. J. O'BRIEN, Accountant.

Approved:

M. G. AGUIRRE, Warden.

The grain-bag season opened in January last with prospects which promised a large and profitable season's business, and, notwithstanding the fact that there were no late rains to stimulate the development of grain at the most critical time of its growth—resulting in a short crop in many localities—and also the fact that standard Calcutta bags have been more plentiful and cheaper than for some years past, we succeeded in the early spring in disposing of the probable output of the jute mill up to August 1, 1903.

I trust you will pardon me for calling your attention to the very handsome showing made by the Jute Department during the past year, it being the banner year since the establishment of that industry.

I have received a number of letters complimenting me on the superior quality of San Quentin grain bags as compared with imported bags, indicating that in our efforts to operate the jute mill up to the full limit of its capacity, we have not sacrificed the quality of our product.

Taking the entire history of the Jute Department up to a year ago, no showing equal to that of the fifty-third fiscal year had been made; however, a comparison of the fifty-fourth, or last, fiscal year with the fifty-

third—notwithstanding the higher price paid for raw jute—shows the net results to be considerably in favor of the fifty-fourth fiscal year over the fifty-third, viz:

COMPARATIVE STATEMENT.

	53d Fiscal Year.	54th Fiscal Year.		
Raw jute, cost per lb.	3.18½c.	3.25¼c.	Advance..	0.07½c.
Grain bags manufactured.....	4,325,400	4,526,700	Gain	201,300
Grain bags sold ..	4,114,900	4,162,870	Gain	47,970
Per cent of loss in manufacturing	3.08%	2.85%	Decrease..	0.23%
Net sales.....	\$241,853.85	\$252,211.99	Gain	\$10,358.14
Net profit.....	\$56,207.36	\$57,488.04	Gain	\$1,280.68

The net profits of the Jute Department for the last four years were \$190,723.79, and for the next preceding four years, \$86,128.10.

IMPROVEMENTS.

At the time of making my last report, while satisfied that the substitution of electrical power for that of steam would prove of material advantage, it was then scarcely more than an experiment with us. I am now prepared to say, however, that this change has proven a great step in advance; for, in addition to its being much more economical in respect to the operating expense, the machinery of the mill runs much smoother and more satisfactory in every way, making it possible for the operatives to produce a superior article of burlap, also a greater quantity. Since the installation of the electric power plant for running the jute mill, and the new electric lighting system, also the completion of the several residences erected for the employés of the prison, during the fifty-third fiscal year, mention of which was made in my last report, no important improvements have been made about the institution, with the exception of the road work, which I will mention later. However, thorough repairs have been made wherever required.

As you are aware, at the last session of the State Legislature an appropriation of \$5,000 was made for the purpose of constructing a new storage warehouse here, and while the building, owing to press of other work, has not yet been erected, I am glad to leave this heritage to my successor, as the lack of adequate storage room has been a serious handicap to the Jute Department in respect to handling raw jute and grain bags for several years past, and especially since the output of the mill has been so largely increased, necessitating the purchase of nearly fifty per cent more raw jute.

The work on the roads in and about the prison grounds, in progress at the time of my last annual report, has been completed and such roads are now in much better shape than for many years past, and the work done is of a most substantial character. The new law passed at the last session of our State Legislature, providing for the employment of convict labor on our county roads, is being complied with and good progress is being made.

While dealing with the subject of improvements I deem it advisable and for the best interests of the institution to most earnestly urge the erection, at an early day, of a substantial gun post at the chicken ranch, on a site at or near the end of the old dike. With a well-equipped gun post located as above suggested, not only the lower gate of the prison would be much better covered than at present, but also the dock and water front (where a large number of prisoners are frequently employed), as well as the prison cemetery and the valley embracing the vegetable gardens, etc. This improvement has already been suggested to your Honorable Board, and my earnest conviction that it is of the greatest importance is my excuse for again calling your attention to the matter—believing that at present the lower or back part of the prison is not fortified against an outbreak as it should be.

I would also call your further attention to the proposed plan of tearing down the old gun post, known as "Liberty Post," and constructing a new gun post at a point some eighty or one hundred yards distant from the present site, on the flat between the prison road and the county road. Much of the old material could be used to good advantage in the erection of a new post, which would greatly reduce the expense. The location suggested would enable the guard to have a much better command of the more remote portions of the valley, and also enable him to discern very readily the identity of any person passing on either road, while now it is somewhat difficult for the guard occupying Liberty post to accurately identify a person traveling on the prison or lower road. At best, Liberty post is very old and very unsafe, and is entirely too small and inconvenient, placing the guard at a very great disadvantage in operating the gun, as to reach it he is obliged to climb up a ladder through a small trap-door, and even then has barely room to operate the gun.

DISCIPLINE.

It gives me pleasure to report that, with the faithful support and assistance of the employés of the institution, I have been able to maintain the same standard of discipline throughout the year as in the past; in fact, the punishment record has been the lightest of any year during my administration, and I feel safe in asserting that the discipline of this prison will compare favorably with that of the best regulated penal institutions of the country conducted under the "congregate system."

Two of our inmates attempted to escape last fall by tunneling through into the prison sewer, but their plans were discovered and frustrated before they were able to put them into execution, and the guilty ones punished. There have been no escapes during the year.

A number of attempts have been made to smuggle opium into the prison, but there has been no relaxation of the vigilance exercised in

this direction, with the result that such schemes have always been "nipped in the bud," and to-day the institution is perfectly free from all traffic in this or kindred drugs.

PAROLE SYSTEM.

The parole system is working smoothly and satisfactorily, there having been no violations of the parole law during the year, although one prisoner, who violated his parole during the latter part of the previous fiscal year, was returned to the prison July 12, 1902, and was afterwards deprived by your Honorable Board of all credits earned or to be earned by him. Monthly reports from paroled prisoners have been received regularly and promptly, and show fair earnings.

Prisoners on parole June 30, 1902.....	20
Prisoners paroled during the fifty-fourth fiscal year.....	24
	<hr/> 44
Prisoners discharged during the fifty-fourth fiscal year.....	13
Prisoners died during the fifty-fourth fiscal year.....	1
Prisoners returned for violation of parole.....	1
	<hr/> 15
Prisoners remaining on parole June 30, 1903.....	29

INCREASING POPULATION.

The report of the Turnkey shows that the prison population is still increasing, the number on hand at the close of the fifty-fourth fiscal year being 53 more than at the close of the previous year. The average monthly population for the year just closed is 1,478 $\frac{1}{4}$, as against 1,407 $\frac{1}{2}$ for the fifty-third fiscal year.

It is with considerable gratification that I am able to report that in the matter of "Hayes et al. vs. Joseph Levy"—which you are aware refers to the 50,000 San Quentin grain bags that were surreptitiously sold to said Joseph Levy during the year 1900 by the former jute accountant, C. J. Walden—judgment has been rendered against said Levy in the sum of \$3,133.25, and the amount named has been paid over to me by the Attorney-General.

CONCLUSION.

In closing my report I wish to express my sincere appreciation of the kind and generous coöperation extended to me by your Honorable Board during my entire administration. For this kind consideration, and for the faithful support of the officers and employés of the institution, I am under many lasting obligations.

Very respectfully yours,

M. G. AGUIRRE,
Warden.

CLERK'S REPORT.

CLERK'S OFFICE, CALIFORNIA STATE PRISON,
SAN QUENTIN, September 1, 1903.

To the Honorable the State Board of Prison Directors:

GENTLEMEN: Herewith please find a tabulated statement of the financial transactions of this prison for the fifty-fourth fiscal year, ending June 30, 1903.

JAMES M. OLIVER,
Clerk.

TABLE No. 1.
Cash Receipts of the State Prison at San Quentin during the Fifty-fourth Fiscal Year, ending June 30, 1903.

1902 1903.	General Appropriation		State Prison Fund.	Jute Revolving Fund.	United States.	Jute Department.	Commissary Department.	Hospital Department.	Library.
	Fifty-third Fiscal Year.	Fifty-fourth Fiscal Year.							
1902--July	\$13,320 01		\$44,182 34	\$81,000 00		\$14 30	\$310 92	\$10 50	\$1 70
August		\$5,001 13	2,756 55		\$2,279 95	171 05	378 78	10 85	
September		13,333 48	27,613 26			13 45	379 41	8 10	
October		9,166 53	14,765 99		166 50	7 75	377 25	15 55	40
November		4,999 51	2,721 48		2,317 25	7 15	374 05	14 80	
December		9,166 38	13,158 34			25 50	453 00	13 05	75
1903--January		9,167 13	13,192 00		136 00	5 50	441 03	15 35	
February		9,167 26	15,862 14	31,679 70	2,723 70	16 70	431 10	11 25	1 25
March		13,335 51	23,833 89	760 60		13 50	394 10	11 45	45
April		9,167 73	15,218 15		398 50	4 70	416 15	10 55	1 90
May		9,165 39	12,927 42		2,840 60	3 60	375 85	11 20	
June		9,165 62	16,245 90	95,295 90		8 90	448 11		
Totals	\$13,320 01	\$100,835 67	\$202,477 46	\$208,736 20	\$10,862 50	\$287 10	\$4,779 75	\$143 65	\$6 45
1902 1903.									
		Grain Bags.	Captain of the Yard's Department.	Turnkey's Department.	Stock Department.	Board and Rent.	Guards' Department.	Miscellaneous.	Totals.
1902--July			\$72 15	\$98 00	\$47 25	\$178 70	\$3 15	\$122 05	\$189,340 20
August			87 05	126 22	47 09	174 97	2 20	120 42	15,414 21
September		\$49,979 13	72 20	73 40	33 30	169 40	2 20	331 85	44,454 41
October		2,424 36	71 10	78 50	34 80	163 65		121 42	29,276 24
November		4,306 80		116 08	34 20	157 50	2 95	102 00	10,912 97
December		15 75	71 55	99 60	40 05	153 15	60	129 59	23,327 31
1903--January		55 50	98 47	109 60	38 81	158 00	2 60	277 86	23,697 85
February		17,443 67	88 40	57 20	33 00	160 15	50	163 97	77,839 99
March		8,008 26	74 75	121 15	34 20	142 50	1 75	140 19	40,872 30
April		4,020 90	70 05	223 90	36 35	158 55	4 25	45 65	29,777 33
May		26,177 71	80 65	44 70	32 30	157 00		155 50	51,971 92
June		86,883 98	72 40	44 55	30 75	143 30	1 45	127 33	208,474 19
Totals		\$203,574 01	\$954 77	\$1,192 90	\$142 10	\$1,916 87	\$21 65	\$1,837 83	\$751,388 92

TABLE No. 2.

Cash Disbursements of the State Prison at San Quentin during the Fifty-fourth Fiscal Year, ending June 30, 1903.

1902-1903.	Electric Supplies.	Refunds to Grain Bag Purchasers.	State Prison Fund.	June Revolving Fund.	Merchandise.	Salaries of Officers and Guards.	Salaries of Jute Mill Employes.	Freight.	Allowances Paid Discharged Prisoners.	Transportation Paid Discharged Prisoners.	Transportation of Insane Prisoners.	Gas.
1902-July	\$16,685 97	\$201 15		\$50,487 20	\$25,825 58	\$5,000 00	\$2,702 52	\$2,774 12	\$155 00	\$171 95	\$8 60	\$660 30
August				7,198 63		5,001 13	2,726 55		210 00	200 00		
September	3,172 24	584 35		3,316 07	23,329 98	5,000 14	2,657 19	1,753 96	90 00	67 55		379 90
October	15 02			4,811 02	13,692 69	5,000 00	2,648 00	435 86	260 00	219 55		96 20
November				2,987 13		4,999 51	2,721 48		140 00	94 85		
December	85 59	30 32		668 59	11,460 68	5,000 00	2,736 32	285 35	165 00	150 95	17 95	273 45
1903-January	85 72			959 07	10,607 69	4,999 52	2,710 42	134 66	220 00	159 65		451 10
February	15 74			20,902 39	14,160 65	4,999 52	2,756 40	219 96	115 00	87 45	32 05	625 40
March	143 01	11 10	\$72 93	8,449 82	23,106 65	4,999 29	2,775 79	1,413 00	195 00	151 00		1,060 12
April	130 66			5,075 50	13,256 79	5,001 13	2,799 13	320 32	170 00	145 95	17 95	487 43
May	33 79		21,262 83	8,584 98	11,789 34	5,000 00	2,757 99	110 50	155 00	145 50	24 60	369 40
June	66 71			87,739 07	12,303 17	4,999 52	2,745 09	690 38	155 00	140 00	7 85	276 40
Totals	\$20,414 45	\$826 92	\$21,335 76	\$201,179 37	\$159,533 22	\$59,999 76	\$32,736 88	\$8,138 11	\$2,030 00	\$1,734 40	\$109 00	\$4,679 70
1902-1903.												
1902-July				\$1,479 00	\$286 27	\$855 89	\$120 65	\$25 00	\$23 70	\$148 00	\$81,000 00	\$139,340 20
August				1,522 24	291 22	419 75	53 75	25 00	48 00			15,384 21
September	\$1,000 00			856 58	113 41	184 58			34 05			44,453 59
October									53 15			28,777 06
November												10,942 97
December				731 94	104 75	244 62	47 85		18 05			23,827 31
1903-January	1,400 00			610 42	120 17	91 68	43 75					23,697 85
February	2,100 00			404 00	120 17	91 68						77,839 99
March	900 00			420 10	105 57	172 68			26 05	31,679 70		46,872 30
April	1,800 00			1,026 15	240 84	468 05		50 00	73 55	12 70		29,476 73
May	900 00			542 71	118 71	95 95						51,956 82
June				522 66	100 78	667 55			31 40			208,563 49
Balance cash in bank.	1,800 00			674 04	224 61	596 45	408 20		48 40		95,295 90	256 40
Totals	\$9,900 00		\$5,157 50	\$8,587 07	\$1,706 33	\$3,797 20	\$674 20	\$100 00	\$356 35	\$148 00	\$207,988 30	\$751,388 92

TABLE No. 3.

Abstract of Expenses for the Fifty-fourth Fiscal Year.

Library Department		\$145 68
Expenses of State Prison Directors		1,350 50
Hospital Department		6,104 55
Captain of the Yard's Department		13 668 61
Turnkey's Department		17,033 38
"Warden's" House—Subsistence		733 29
Printing		362 50
Clerk's Office		299 08
General repairs		4,356 72
General expense		2,375 57
Officers and Guards' mess	\$17,098 60	
Night Guards' mess	1,443 64	
Female mess	1,926 55	
Prison mess	47,737 81	
		68,206 60
Discharged prisoners		2,030 00
Transportation of discharged prisoners		1,734 40
Transportation of insane prisoners		121 90
Salaries		59,999 76
Water		7,195 03
Gas		4,257 60
Electric lights		4,795 20
Advertising		89 95
Execution account		75 00
Stock Department		5,671 74
United States		9 65
Total expense		\$200 616 71

TABLE No. 4.

Cost of Maintenance of Prisoners per Head.

Average number of prisoners for the year, 1,478 $\frac{3}{4}$ —total cost		\$200,616 71
Average cost per head per month		11 30 $\frac{55}{100}$
Average cost per head per day		37 $\frac{88}{100}$
Total expense for the year (Table No. 3)		\$200,616 71
Earnings of the Jute Department	\$57,488 04	
Support of United States prisoners	10,695 00	
Rent of State houses	998 97	
Increase in inventory Warden's Residence	201 75	
Commissary Department	378 71	
Guards' Department	1,466 42	
		71,228 89
Net expenses of the prison for the year		\$129,387 82
Average cost per head per month—net		7 29 $\frac{15}{100}$
Average cost per head per day—net		24 $\frac{30}{100}$

TABLE No. 5.
Assets and Liabilities.

ASSETS.			
Buildings.....		\$503,728 70	
Real estate.....		50,910 55	
Reservoirs.....		31,278 55	
Furniture Department.....		12,925 36	
Commissary Department—			\$598,843 16
Stock.....	\$2,965 20		
Furniture and fixtures.....	988 77		
Captain of the Yard's Department, inventory.....		\$3,953 97	
Turnkey's Department, inventory.....		26,869 12	
Guards' Department, inventory.....		12,904 70	
Hospital Department, inventory.....		31,363 78	
Stock Department, inventory.....		2,980 90	
Warden's Residence—Furniture and fixtures.....		12,202 40	
Clerk's Office, inventory.....		8,535 93	
Library, inventory.....		2,244 79	
		1,608 70	102,663 29
Prison mess, inventory.....		\$5,372 55	
Officers' and Guards' mess, inventory.....		1,063 39	
Night Guards' mess, inventory.....		261 73	
			6,697 67
Due from United States, support of United States prisoners.....		\$2,801 30	
Due from U. S. R. S. "Independence," support of United States prisoners (marines).....		566 00	
Due from Folsom State Prison.....		89 95	
Due from sundry purchasers of commissaries and Jute Mill supplies.....		587 46	
			4,044 71
Cash in State Prison Fund, June 30, 1903.....		\$86,608 87	
Cash in California State Bank, June 30, 1903.....		256 40	
Cash in General Appropriation Fund—			
Support.....	\$4,163 92		
Salaries.....	5,000 00		
		9,163 92	
Cash in Jute Revolving Fund.....		92,443 17	
			188,472 36
Jute factory and equipment, inventory.....		\$448,828 75	
Jute Department—			
Raw jute.....	\$92,813 34		
Raw jute in process of manufacture.....	3,756 61		
Manufactured goods.....	5,753 14		
Stock.....	11,373 01		
		113,696 10	
Due from sundry purchasers of grain bags.....		102,205 26	
			664,730 11
Total assets, June 30, 1903.....			\$1,565,451 30
LIABILITIES.			
Unpaid bills for merchandise, month of June, 1903.....		\$20,921 58	
Unpaid salaries of officers and guards, month of June, 1903.....	\$5,000 00		
Unpaid salaries of Jute Mill employes, month of June, 1903.....	2,767 99		
		7,767 99	
			28,689 57
Excess of assets, June 30, 1903.....			\$1,536,761 73

TURNKEY'S REPORT.

SAN QUENTIN, CAL., June 30, 1903.

To HON. M. G. AGUIRRE, Warden State Prison at San Quentin, California :

SIR: I have the honor to submit herewith in tabular statements, my annual report, for the fifty-fourth fiscal year ending June 30, 1903.

BURT H. SWAN,
Turnkey.

TABLE No. 1.

A Summary of Receipts and Discharges from July 1, 1902, to June 30, 1903.

Month.	1902—																						500
	July	August	September	October	November	December	January	February	March	April	May	June	Totals										
Received per Commitment	38	44	21	46	37	53	50	51	54	49	43	52	538										
Returned for Violating Parole	1	0	0	0	0	0	0	0	0	0	0	0	1										
Returned Witnesses	1	0	0	0	1	2	0	0	0	0	1	0	7										
Resentenced and Returned	0	1	0	0	0	0	0	0	0	0	0	0	1										
Returned from Asylum	0	0	0	0	0	0	1	0	1	0	0	0	5										
Transferred from Folsom	0	0	0	0	0	0	0	0	2	1	0	0	1										
Total Received	40	45	21	47	38	55	51	51	57	50	43	55	553										
On Hand at the End of Each Month	1,474	1,467	1,463	1,448	1,455	1,458	1,466	1,482	1,490	1,502	1,511	1,529	17,745										
Discharged per Act and Restored	6	7	4	15	5	3	12	12	5	1	2	8	70										
Discharged per Act	25	38	16	41	22	34	16	24	34	21	28	25	334										
Died	6	2	2	3	1	0	1	2	2	2	0	1	22										
Out as Witness	1	0	1	1	0	2	0	0	0	1	1	1	7										
Paroled	2	0	0	0	1	7	3	2	3	2	3	0	24										
Transferred to Asylum	1	0	0	0	0	3	0	0	2	0	0	0	8										
Transferred to Folsom	1	0	0	0	0	2	0	0	2	0	0	0	1										
Out for New Trial	0	2	2	0	0	2	1	0	2	0	0	1	11										
Out for Resentence	0	1	0	0	0	0	0	1	0	0	0	0	1										
By Order Secretary of Navy	0	1	0	0	0	0	1	0	0	0	0	0	2										
Executed	0	1	0	0	0	0	0	0	2	0	0	0	3										
Writ Habeas Corpus	0	0	0	0	0	0	0	0	1	0	0	0	4										
Pardoned	0	0	0	0	0	0	0	11	0	0	0	0	11										
Suicide	0	0	0	0	0	0	0	0	0	0	0	1	2										
Total Discharged	42	52	25	62	31	52	43	35	49	38	34	37	500										

Prisoners on hand June 30, 1902

Prisoners received from July 1, 1902, to June 30, 1903

1,476

553

Total

2,029

Prisoners discharged from July 1, 1902, to June 30, 1903

500

Prisoners on hand June 30, 1903

1,529

Monthly average

1,478%

Increase during year

53

TABLE No. 2.

Nativity of Prisoners.

Foreign.	Nb.	United States.	No.
Africa	1	Alabama	4
At Sea	1	Alaska	2
Australia	6	Arizona	3
Austria	10	Arkansas	1
Azores	1	California	391
British Columbia	3	Colorado	9
Canada	32	Connecticut	5
China	55	Dakota	2
Corsica	1	Delaware	1
Cape Verde Island	1	District of Columbia	5
Canary Island	1	Florida	3
Cuba	2	Georgia	12
Denmark	6	Illinois	61
England	31	Indian Territory	2
Finland	3	Indiana	12
France	10	Iowa	28
Germany	65	Kansas	10
Greece	4	Kentucky	29
Ireland	43	Louisiana	5
Italy	19	Maine	7
Japan	11	Maryland	7
Mexico	61	Massachusetts	48
New Brunswick	1	Michigan	15
New Zealand	1	Minnesota	12
Nova Scotia	3	Mississippi	3
Poland	3	Missouri	52
Portugal	3	Montana	3
Russia	1	Nebraska	11
Scotland	14	Nevada	8
South America	7	New Hampshire	4
Spain	1	New Jersey	11
Sweden and Norway	20	New York	121
Turkey	1	New Mexico	4
Wales	3	North Carolina	8
Switzerland	7	Ohio	40
		Oregon	17
		Pennsylvania	51
		Rhode Island	2
		Sandwich Islands	3
		South Carolina	2
		Tennessee	14
		Texas	21
		Utah	1
		Vermont	8
		Virginia	12
		West Virginia	4
		Washington	8
		Wisconsin	12
		Wyoming	3
Total	432	Total	1,097

Recapitulation.

Foreign	432
United States	1,097
Total	1,529

TABLE No. 3.
Classification of Crime.

Crime.	No.	Crime.	No.
Abduction	2	Incest	5
Arson, first degree	3	Injuring jail, and burglary, second degree, and prior	1
Arson, second degree	9	Kidnaping	1
Assault with deadly weapon	32	Manslaughter	55
Burglary	43	Manslaughter, and murder, second degree	1
Burglary and injuring jail	1	Mayhem	1
Burglary and priors	3	Murder	16
Burglary and robbery	1	Murder, first degree	124
Burglary, first degree	179	Murder, second degree	82
Burglary, first degree, and priors	17	Murder, assault to	26
Burglary, first and second degrees	4	Murder, assault to, and prior	3
Burglary, first degree, attempt	5	Murder, assault to, and forgery	1
Burglary, first degree, attempt and prior	1	Murder, assault to, and assault to rob	1
Burglary, first and second degrees, and prior	1	Murder, assault to, and burglary, second degree	2
Burglary and assault with deadly weapon	1	Murder, assault to, and robbery	2
Burglary, second degree	182	Murder, assault to, and assault with a deadly weapon	1
Burglary, second degree, and priors	12	Murder, second degree, and assault with a deadly weapon	1
Burglary, second degree, and grand larceny	3	Obtaining money by false pretenses	4
Burglary, second degree, and assault with a deadly weapon	1	Passing fictitious check	7
Burglary, second degree, and robbery	2	Perjury	3
Crime against nature	12	Petit larceny, and prior	21
Crime against nature, attempt	2	Rape	37
Counterfeiting	14	Rape, assault to	28
Conspiracy	4	Rape, assault to, and prior	2
Embezzlement	18	Receiving stolen property	4
Felony	38	Robbery	125
Felony, and prior	1	Robbery, and priors	13
Forgery	73	Robbery, assault to commit	12
Forgery, and prior	1	Robbery, assault to commit, and prior	3
Grand larceny	259	Seduction	1
Grand larceny, attempt	3	Selling liquor to Indians	2
Grand larceny, and priors	12	Sodomy	4
Grand larceny, and assault with deadly weapon	1		
Grand larceny, and assault to murder	1	Total	1,529

General Classification.

Crimes against the person	446
Crimes against property	1,036
Crimes against property and person	47
Total	1,529

TABLE No. 4.

Terms of Imprisonment.

Term.	No.	Term.	No.
Six months	1	Sixteen years	1
Nine months	1	Sixteen years and six months	2
One year	102	Seventeen years	5
One year and two months	2	Eighteen years	2
One year and three months	1	Eighteen years and six months	1
One year and six months	24	Twenty years	52
Two years	152	Twenty-one years	5
Two years and two months	1	Twenty-three years	1
Two years and six months	16	Twenty-four years	3
Two years and ten months	1	Twenty-five years	34
Three years	131	Twenty-six years	5
Three years and six months	10	Twenty-seven years	2
Four years	92	Twenty-eight years	1
Four years and six months	2	Thirty years	15
Five years	181	Thirty-one years	1
Six years	46	Thirty-three years	1
Six years and six months	2	Thirty-five years	5
Seven years	62	Thirty-nine years	1
Seven years and six months	6	Forty years	9
Eight years	50	Forty-five years	1
Eight years and six months	1	Fifty years	4
Nine years	9	Sixty years	2
Ten years	176	Sixty-six years	1
Ten years and six months	2	Ninety-nine years	1
Eleven years	2	Life	176
Twelve years	24	Death	10
Thirteen years	1		
Fourteen years	28	Total	1,529
Fifteen years	62		

Recidivists.

Second-termers	202
Third-termers	68
Fourth-termers	28
Fifth-termers	8
Sixth-termers	3
Seventh-termers	1
Eighth-termers	2
First-termers	1,217
Total	1,529

TABLE No. 5.

Age of Prisoners When Received.

Years.	No.	Years.	No.
Fourteen	1	Forty-six	18
Fifteen	2	Forty-seven	13
Sixteen	3	Forty-eight	21
Seventeen	18	Forty-nine	9
Eighteen	43	Fifty	24
Nineteen	56	Fifty-one	14
Twenty	48	Fifty-two	11
Twenty-one	50	Fifty-three	7
Twenty-two	71	Fifty-four	12
Twenty-three	78	Fifty-five	6
Twenty-four	60	Fifty-six	6
Twenty-five	72	Fifty-seven	10
Twenty-six	73	Fifty-eight	11
Twenty-seven	65	Fifty-nine	6
Twenty-eight	62	Sixty	7
Twenty-nine	56	Sixty-one	7
Thirty	54	Sixty-two	6
Thirty-one	32	Sixty-three	4
Thirty-two	52	Sixty-four	2
Thirty-three	49	Sixty-five	3
Thirty-four	35	Sixty-six	2
Thirty-five	38	Sixty-seven	5
Thirty-six	31	Sixty-eight	1
Thirty-seven	24	Sixty-nine	3
Thirty-eight	59	Seventy	2
Thirty-nine	27	Seventy-two	4
Forty	40	Seventy-three	1
Forty-one	26	Seventy-five	1
Forty-two	24	Seventy-six	3
Forty-three	21	Seventy-eight	1
Forty-four	16		
Forty-five	23	Total	1,529

Prisoners' Educational Abilities.

Read and write	1,349
Cannot read or write	180
Total	1,529

TABLE No. 6.

Counties Represented.

Counties.	No.	Counties.	No.
Alameda	77	San Benito	5
Amador	8	San Bernardino	30
Butte	22	Sacramento	39
Calaveras	10	San Diego	24
Colusa	8	San Joaquin	58
Contra Costa	11	San Luis Obispo	18
Del Norte	3	San Mateo	22
Fresno	60	Santa Barbara	19
Glenn	2	San Francisco	362
Humboldt	15	Santa Clara	38
Kern	38	Santa Cruz	11
Kings	22	Shasta	39
Lake	6	Sierra	8
Los Angeles	192	Siskiyou	14
Madera	4	Solano	29
Marin	5	Sonoma	30
Mariposa	5	Stanislaus	20
Mendocino	10	Sutter	5
Merced	13	Tehama	9
Modoc	1	Trinity	6
Mono	1	Tulare	24
Monterey	28	Tuolumne	11
Napa	12	Ventura	20
Nevada	7	Yolo	2
Orange	18	Yuba	20
Placer	23		
Plumas	2	Total	1,498
Riverside	34		

United States Prisoners.

<i>United States Districts.</i>		<i>United States Naval Stations.</i>	
Arizona	2	Mare Island	7
Alaska	13	Corea	1
Idaho	3		
Washington	5	Total	8
Total	23	Total United States Districts	23
		Total counties represented	1,498
		Grand total	1,529

TABLE No. 7.

Prisoners' Legitimate Occupations.

Occupations.	No.	Occupations.	No.	Occupations.	No.
Actor	3	Fisherman	3	Peddler	7
Agent	1	Florist	1	Photographer	4
Amalgamator	1	Foundryman	1	Physician	1
Apiarist	1	Fruitpicker	6	Pianomaker	2
Apprentice, U. S. Navy	2	Gardener	11	Plasterer	1
Architect	3	Gasfitter	2	Plumber	17
Artist	1	Gilder	1	Porter	7
Accountant	6	Glassbeveler	1	Preacher	1
Baker	18	Grocer	1	Printer	13
Barber	34	Harnessmaker	1	Railroadman	5
Bartender	12	Hatter	1	Real estate agent	3
Blacksmith	18	Hodcarrier	2	Restaurateur	4
Blockmaker	1	Horseshoer	6	Roofer	2
Boilermaker	12	Hostler	21	Saddler	1
Bookkeeper	13	Hotelkeeper	5	Sailor	40
Bootblack	2	Housekeeper	4	Salesman	9
Brewer	1	Hunter	2	School teacher	2
Bricklayer	9	Insurance agent	4	Servant	7
Broker	1	Interpreter	1	Shepherd	2
Butcher	17	Ironmolder	11	Shipbuilder	1
Butler	1	Jackscrew	1	Shoemaker	23
Cabinetmaker	5	Jeweler	4	Shopgirl	1
Canmaker	2	Jockey	1	Slater	1
Carpenter	37	Journalist	2	Stage driver	3
Chaircaner	1	Laborer	307	Stenographer	3
Cigarmaker	2	Laundryman	22	Stewart	2
Clerk	37	Lawyer	3	Stonemason	9
Coachman	2	Lineman	4	Stovefitter	1
Confectioner	2	Longshoreman	2	Student	3
Consular clerk	1	Lumberman	1	Sugarmaker	1
Contractor	2	Machinist	27	Surveyor	1
Cook	85	Mail clerk	1	Tailor	21
Cooper	2	Manicure	1	Tanner	2
Cowboy	5	Marine	1	Teamster	56
Dairyman	4	Merchant	6	Telegrapher	5
Dentist	1	Miller	4	Tightrope walker	1
Dishwasher	5	Miner	62	Tinsmith	3
Dogtrainer	1	Musician	4	Underwriter	1
Dressmaker	2	No occupation	39	Upholsterer	5
Druggist	6	Nurse	13	Vaquero	8
Dyer	1	Nurseryman	1	Veterinary doctor	2
Electrician	13	Oiler	3	Waiter	86
Embalmer	1	Oildriller	3	Weaver	1
Engineer, civil	2	Optician	1	Wireworker	1
Engineer, mechanical	20	Painter	46	Woodchopper	4
Engraver	2	Paperhanger	2		
Farmer	82	Paper manufacturer	1	Total	1,529
Fireman	23	Patternmaker	1		

TABLE No. 8.

Clothing Issued from July 1, 1902, to June 30, 1903.

1901-1902.	Citizens' Clothing.							Handkerchiefs						
	Hickory Shirts		Hats		Shirts		Shoes		Pants		Vests		Coats	
	7	5	28	13	48	27	27	27	27	27	27	27	27	27
	60	60	38	26	41	32	32	32	32	32	32	32	32	32
	60	60	23	7	31	18	18	18	18	18	18	18	18	18
	60	60	4	34	79	45	48	48	48	48	48	48	48	48
	60	60	4	7	43	20	19	20	20	20	20	20	20	20
	60	60	2	19	47	32	31	31	31	31	31	31	31	31
	60	60	42	113	289	179	175	175	175	175	175	175	175	175
360	360	216	7	53	31	31	31	31	31	31	31	31	31	
60	60	36	6	45	20	20	20	20	20	20	20	20	20	
60	60	10	13	61	25	27	29	29	29	29	29	29	29	
60	60	8	34	72	18	20	21	21	21	21	21	21	21	
60	60	12	15	52	17	19	20	20	20	20	20	20	20	
60	60	4	14	65	23	22	25	22	25	22	22	22	22	
720	720	408	179	637	326	314	314	314	314	314	314	314	314	
							309	309	309	309	309	309	309	309
							88	88	88	88	88	88	88	88
							1,282	1,282	1,282	1,282	1,282	1,282	1,282	1,282
							1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401
							411	411	411	411	411	411	411	411
							811	811	811	811	811	811	811	811
							4,095	4,095	4,095	4,095	4,095	4,095	4,095	4,095
							1,415	1,415	1,415	1,415	1,415	1,415	1,415	1,415
							6,110	6,110	6,110	6,110	6,110	6,110	6,110	6,110
							1,022	1,022	1,022	1,022	1,022	1,022	1,022	1,022
							3,108	3,108	3,108	3,108	3,108	3,108	3,108	3,108
							3,092	3,092	3,092	3,092	3,092	3,092	3,092	3,092
							2,871	2,871	2,871	2,871	2,871	2,871	2,871	2,871
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CAPTAIN OF THE YARD'S REPORT.

TO HON. M. G. AGUIRRE, *Warden State Prison at San Quentin, California:*

SIR: I have the honor to submit herewith, in tabular statements, my annual report for the fifty-fourth fiscal year, ending June 30, 1903.

J. D. HUNTER,
Captain of Yard.

LABOR REPORT FOR THE FISCAL YEAR ENDING JUNE 30, 1903.

Productive Class.

	1902.						1903.						Total
	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April.	May.	June.	
Jute Department	19,007	20,361	18,891	20,879	17,856	16,634	16,043	18,107	19,107	19,520	19,533	20,140	226,078
Engineer Department	75	74	48	54	46	38	26	23	25	26	25	26	486
Foundry Department	875	888	824	837	808	881	926	820	959	959	921	915	10,723
Stock and Stable Department	648	531	479	537	443	446	416	368	459	416	417	452	5,612
Female Department	771	763	750	788	745	704	666	589	634	582	610	630	8,232
Wheelwright's Shop	50	52	24	54	46	50	52	46	31	26	25	26	482
Upholsterer's Shop	75	78	72	81	69	75	78	69	78	78	75	78	906
Locksmith's Shop	25	26	24	27	23	25	26	23	25	26	25	26	301
Carpenter's Shop	740	753	696	763	605	634	652	589	590	550	513	545	7,630
Plumber's Shop	117	104	100	93	90	90	93	69	87	90	93	90	1,116
Cooper's Shop	25	26	24	27	23	25	26	23	25	26	25	26	301
Paint Shop	175	182	168	189	149	175	166	137	125	130	150	145	1,891
Tin Shop	228	231	192	193	161	175	166	161	183	208	200	200	2,298
Coal Yard	25	26	27	27	23	25	26	23	26	26	25	26	305
Vegetable Garden	540	527	459	522	477	433	456	442	518	685	929	689	6,713
Flower Garden	362	460	511	489	462	480	497	509	617	600	648	503	6,269
Improvements	125	107	120	155	150	143	135	115	124	136	125	130	1,565
Stevedore	387	401	385	413	474	474	429	390	490	520	536	559	5,467
County Road Gang	784	814	824	870	707	664	750	757	891	911	890	848	9,710
Chicken Ranch	51	62	60	62	60	37	40	40	62	60	62	60	656
Hog Ranch	51	93	90	93	90	90	93	84	93	90	93	67	1,067
Blacksmith Shop	125	130	142	162	138	149	156	138	163	156	150	148	1,757
Laundry Department	1,013	1,049	926	1,049	874	969	1,015	915	1,085	1,084	958	1,007	11,944
Shoe Shop	398	416	383	432	344	400	434	390	471	501	487	484	5,140
Tailor Shop	673	687	585	629	547	581	606	634	615	656	625	649	7,487
Totals	27,385	28,841	26,840	29,605	25,349	24,397	23,973	25,461	27,483	28,062	28,140	28,600	324,136

LABOR REPORT FOR THE FISCAL YEAR ENDING JUNE 30, 1903.

Non-Productive Class.

	1902.						1903.						Total
	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April.	May.	June.	
Warden's Office.....	62	62	60	77	62	62	62	61	93	90	79	90	860
Captain of Yard's Office.....	248	263	240	248	240	240	250	251	279	292	276	284	3,111
Clerk's Office.....	31	31	30	31	30	30	31	28	31	30	31	58	399
Captain of Guard's Office.....	62	62	60	62	60	62	49	29	31	55	62	60	654
Commissary's Office.....	214	218	210	217	210	210	217	193	217	210	238	240	2,594
Library.....	155	130	121	155	150	163	146	115	125	130	125	130	1,645
Barber Shop.....	385	320	312	351	388	390	403	350	400	390	403	390	4,482
Lamp lighter.....	62	62	60	62	60	60	62	56	62	50	62	60	718
Bath-tank Tender.....	27	26	29	31	30	30	31	28	31	30	31	30	354
Cell and Room Tenders.....	866	888	897	923	917	920	987	896	1,014	1,133	1,133	1,074	11,548
Gate and Door Tenders.....	403	403	390	402	390	390	401	336	372	383	403	338	4,611
Hospital Nurses.....	248	246	240	305	300	300	310	298	313	273	279	270	3,382
Sweepers.....	491	503	481	465	440	392	343	286	287	311	300	308	4,607
Scavengers.....	866	929	881	861	837	856	828	765	927	879	901	810	10,340
Whitewashers.....	50	52	48	54	46	50	54	72	100	91	177	183	977
General Mess.....	2,248	2,299	2,211	2,263	2,196	2,171	2,246	2,072	2,311	2,179	2,174	2,215	26,585
Outside Kitchen.....	744	748	691	682	662	664	713	656	742	736	805	767	8,610
Hospital Kitchen.....	62	52	60	62	60	60	62	56	62	60	62	62	720
House Servants.....	1,114	1,033	1,011	1,095	1,035	976	1,028	974	1,085	1,039	1,033	1,008	12,431
Electricians.....	84	87	72	95	92	100	104	92	100	104	112	130	1,172
Photographers.....	62	62	60	67	90	93	73	56	62	60	62	60	807
Messengers.....	62	58	60	62	60	60	62	56	62	60	62	60	724
Guards' Department.....	155	155	150	159	148	150	155	141	169	180	186	180	1,928
Cripples and Insane.....	822	788	745	688	696	677	699	640	704	690	709	724	8,582
Doctor, daily excuses, dungeon.....	452	402	288	409	280	335	391	318	367	435	472	640	4,789
Patients in Hospital.....	677	677	604	535	506	531	502	563	637	671	630	753	7,286
To be executed.....	279	201	198	186	203	252	279	220	217	210	299	300	2,844
Unemployed.....	661	816	694	654	639	3,747	5,334	785	847	955	866	1,171	17,169
Totals	11,592	11,573	10,903	11,201	10,827	13,971	15,822	10,393	11,647	11,026	11,972	12,395	143,922

RESIDENT PHYSICIAN'S REPORT.

SAN QUENTIN, CAL., June 30, 1903.

To HON. M. G. AGUIRRE, *Warden State Prison at San Quentin, California:*

SIR: Herewith is presented the annual report of the medical department for the fiscal year ending June 30, 1903.

We have had a remarkably healthy year, the general health of the prison having been excellent, there being no contagious disease or epidemic of any kind, and the proportion of consumptives showing no increase.

There is one item to which I would like to call your attention that would greatly benefit the hospital; that is, changing the present slab beds to wire mattresses. This would not entail a very great expense and would add greatly to the comfort and welfare of the patients.

Thanking you for your coöperation during the year, I remain,

Yours respectfully,

P. F. CASEY, M.D.,
Resident Physician.

**EXHIBIT A.—Diseases Treated at Hospital Each Month during Fiscal
Year ending June 30, 1903.**

Diseases.	1902.						1903.						Total
	July	August	September	October	November	December	January	February	March	April	May	June	
Asthma	3	2	1		2	3	1						12
Aortic aneurism			1										1
Amputated finger		1	2	1				1	1		1	2	9
Autotoxæmia					1			1	1	1	1		5
Abscess							1	1	2	2	2	1	9
Bilious fever	13	9	13	7	1	7	7	19	22	12	7	17	134
Boil				1					1				2
Bronchitis										1	1	1	3
Constipation		1	1										2
Cerebral concussion			1										1
Caries				1	1	1							3
Concussion of brain											1		1
Diarrhœa		1											1
Dementia						3							3
Dysentery								1		1	2	2	6
Dropsy								1	1		1	1	4
Epilepsy	1	1	1	1	2	1	2	2	1	1	1	1	15
Erysipelas	1	1											2
Fistula	1	1	2	1	1	1	1	1	1	1	1	1	13
Fractured arm			1	1	1	1							4
Fractured toe											1	1	2
Fractured skull and leg										1	1	1	3
General debility	5	5	4	4	6	5	6	6	4	2	6	6	59
Gastralgia	1												1
Gastritis		1	1							1	1	1	5
Gunshot wound											1		1
Hepatitis	1	1											2
Hemorrhage	1	1	1							1			4
Heart disease	1		1	1				1	1				4
Indigestion		1	1		1			1					4
Injured hand											1		1
Locomotor ataxia	3	3	3	3	3	2	2	2	3	3	3	3	33
Lacerated shin							1						1
Lacerated wrist		1	1										2
Meningitis												1	1
Mumps							1	1	1	1			4
Morphinism									1	2			3
Malaria												4	4
Nephritis												2	2
Neuralgia	1	1											2
Neurasthenia			1	1									2
Otitis					1	1							2
Operation on wrist						1							1
Operation on eye						1							1
Obesity								1	1	1	1	1	5
Phthisis	3	3	3	1	2	2	3	2	1	1	1	5	27
Paralysis	1	1	1	1	1	1	1	1	1	1	1	1	12
Piles	1												1
Pleurisy										1	2		3
Pharyngitis										1			1
Rectal fissure	1	1	1										3
Rheumatism	2				1			1	1		1		6
Retinitis								1	1	1	1	1	4
Sprained arm	1												1
Syphilis	1	1	1	1	1	1	1	2	2	1	1	1	14
Swollen glands		2	1	1	1	1	1	1	1				9
Sprained ankle		1		1									2
Scalp wound		1							1				2
Scurvy				1	1	1	1	1	1				6
Tape worm		1											1
Tonsillitis							1	1					2
Tuberculosis												1	1
Unclassified				1			1						2
Totals	42	42	43	29	27	33	31	47	50	37	40	55	486

EXHIBIT D.

Resumé of Work in Medical Department for Fiscal Year ending June 30, 1903.

	1902.						
	July	August	September	October	November	December	Semi-annual Total
Calls on physician	1,132	1,303	1,035	1,215	1,342	1,082	7,009
Daily average	38	43	34	40	45	36	236
Visited in cells	9	9	9	11	10	8	56
Daily average							
Excused from work	45	61	17	70	8	5	206
Daily average	2	2	1	3			8
Patients admitted	14	24	20	13	14	29	114
Patients discharged	15	19	19	12	12	21	98
Monthly invalid list	4	4	3	5	3	2	21
Monthly deaths	3	1	2	3	1	2	12

	1903.						
	January	February	March	April	May	June	Semi-annual Total
Calls on physician	1,540	1,507	1,549	1,647	1,975	1,870	10,088
Daily average	50	50	52	55	66	62	335
Visited in cells	9	13	30	27	37	38	154
Daily average				1	1	1	3
Excused from work	19	35	66	42	58	99	319
Daily average	1	1	3	2	2	4	13
Patients admitted	21	29	25	16	26	28	145
Patients discharged	15	21	25	18	20	21	120
Monthly invalid list	2	1	1	2	1	5	12
Monthly deaths		2	2	2	1	1	8

RESIDENT CHAPLAIN'S REPORT.

SAN QUENTIN, CAL., June 30, 1903.

To HON. M. G. AGUIRRE, *Warden State Prison, San Quentin, Cal.:*

SIR: I herewith present my report as Resident Chaplain of the State Prison at San Quentin, Cal., for the year ending June 30, 1903.

There have been received and added to the library, for the use of prisoners, 392 bound volumes and 3,485 magazines, together with 9,620 first-class literary and religious periodicals. Three hundred and eight volumes (largely magazines) have been bound and added to the library, and many old ones repaired.

There have been drawn from the library by prisoners during the year, 11,928 volumes from the general library, and 7,635 from the Catholic department, aggregating a total of 19,071 volumes, or an average of 1,589 per month.

Religious services have been held regularly each Sabbath, and all have been uniformly well attended and much interest manifested. A large number of prisoners have been found employment and rehabilitated, we trust, permanently, frequently hearing from such with much satisfaction.

The faithful services and ministrations of my honored colleague of the Catholic department is noted with pleasure and satisfaction.

All of which is respectfully reported.

A. DRAHMS,
Resident Chaplain.

REPORT OF THE WARDEN

OF THE

STATE PRISON AT SAN QUENTIN, CALIFORNIA.

FOR THE YEAR ENDING JUNE 30, 1904.

WARDEN'S REPORT.

To the Honorable the State Board of Prison Directors:

GENTLEMEN: Pursuant to the provisions of the law governing this institution, I herewith present the annual report of the San Quentin State Prison for the fifty-fifth fiscal year, ending June 30, 1904, including the report of the Clerk of the Board, showing the financial transactions of the institution during said year and its financial condition at the close of the year. Accompanying this are also the reports of the Captain of the Yard, the Captain of the Guard, the Turnkey, the Resident Physician, and the Chaplain and Librarian, as well as a detailed statement of the operations of the Jute Mill during the year, as follows:

OPERATIONS OF THE JUTE MILL FOR THE FISCAL YEAR ENDING JUNE 30, 1904.

MANUFACTURING STATEMENT OF JUTE DEPARTMENT FOR THE YEAR ENDING JUNE 30, 1904.

Raw jute on hand June 30, 1903	7,134 bales.	
Received during the year	10,013 bales.	
Total amount handled during the year	17,147 bales.	
Less amount on hand June 30, 1904	7,838 bales.	
Total amount used during year	9,309 bales.	
9 309 bales, at 400 lbs. per bale		3,723,600 lbs.
Add decrease of raw jute in process of manufacture—		
July 1, 1903	101,021 lbs.	
June 30, 1904	98,198 lbs.	
		2,823 lbs.
Total amount of raw jute used		3,726,423 lbs.

GOODS MANUFACTURED.

50,552 cuts of 45-inch burlap at 98% equals 4,954,096 yards, at 11.20 oz., equals	3,467,867 lbs.	
1,429 yards 32-inch burlap	1,429 lbs.	
3-ply twine sold and on hand	5,377 lbs.	
Waste twine sold	5,639 lbs.	
Loom waste sold	15,532 lbs.	
Twine used in sewing 3,316,900 Garland bags	51,827 lbs.	
Twine used in sewing 1,191,500 Mooney bags	26,064 lbs.	
Twine used in baling 9,051 bales bags	2,714 lbs.	
Rope used in baling 9,051 bales bags	27,153 lbs.	
Twine used in sewing 3,000 imperfect bags	66 lbs.	
Miscellaneous issues of twine	599 lbs.	
Twine used in hemming 87,714 bags (in mill)	342 lbs.	
Baling rope at press	95 lbs.	
Hemming twine at machines	24 lbs.	
Total weight of goods manufactured		3,604,728 lbs.
Loss in manufacture		121,695 lbs.
Equal to 3.26% loss.		

JUTE INVENTORY OF MATERIAL AND SUPPLIES ON HAND JUNE 30, 1904.

RAW JUTE.

7,626 bales in warehouse.	
192 bales in mill.	
7,818 bales, at 400 lbs. each, at \$2.99 ⁸⁸ / ₁₀₀ per cwt.	\$93,778 47
20 bales (sample lot) in warehouse, at 400 lbs. each, at \$3.04 ¹ / ₄ per cwt.	243 40
7,838 bales	<u>\$94,021 87</u>

RAW JUTE IN PROCESS OF MANUFACTURE.

15,600 lbs. batched.	
2,000 lbs. carded.	
10,500 lbs. drawing.	
8,850 lbs. roving.	
900 lbs. in waste, to be worked over.	
4,369 lbs. in burlap on looms.	
345 lbs. in twine.	
2,862 lbs. in yarn.	
14,088 lbs. in cops.	
1,466 lbs. in spools.	
36,400 lbs. in warp.	
818 lbs. in spools and hanks.	
98,198 lbs. in process of manufacture, at 3.46c. (average).	<u>3,397 65</u>

MANUFACTURED STOCK.

1,779,380 22 x 36-inch grain bags	@ 4.15c.	\$73,844 27	
500 imperfect bags	@ 4.15c.	20 75	
1,013 lbs. 3-ply twine	@ 3.85c.	39 00	
87,714 hemmed bags in mill	@ 3.87c.	3,394 53	
650 yards 32-inch burlap	@ 6.25c.	40 63	
		<u>77,339 18</u>	

MATERIAL AND SUPPLIES.

Jute oil	\$79 50	
Machine oil	28 30	
Material for tools and repairs	4,341 93	
Baling rope	88 00	
Sizing material	46 72	
Miscellaneous	33 14	
	<u>4,615 59</u>	
Stock in machine shop, per inventory	\$2,141 73	
Stock in foundry, per inventory	236 14	
Stock in jute tin shop, per inventory	154 61	
Stock in carpenter shop, per inventory	856 66	
	<u>3,389 14</u>	
Total		<u>\$182,763 43</u>

EXPENSES OF PRODUCTION AND COST PRICE OF MANUFACTURED GOODS
FOR THE YEAR ENDING JUNE 30, 1904.

SPINNING AND WEAVING EXPENSES.

Coal	\$4,940 90	
Jute oil	4,244 21	
Sizing	1,908 75	
Baling rope	16 00	
Machine oil and engine supplies	584 41	
Tools and repairs	13,534 84	
Salaries	30,707 27	
Water	785 52	
Electric power	10,800 00	
Miscellaneous	935 86	
		\$68,457 76
Less expense incurred in sewing of bags and repairing of sewing machines; estimated at 5%	3,422 88	
Net expense of spinning and weaving 4,954,096 yards of burlap		\$65,034 88
Or 1.35 cents per yard.		

SEWING EXPENSES.

Percentage of expenses as above	\$3,422 88	
77,890 lbs. jute twine, at 3.46 cents	2,695 00	
Total expense of sewing 4,503,400 bags		\$6,117 88
Or 0.138 cent per bag.		

BALING EXPENSES.

4½ yds. 45-inch burlap, at 3.50 cents per yard	15.75 cents.	
4.82 oz. jute twine, at 3.46 cents per yard	1.04 cents.	
3 lbs. jute rope, at 3 cents per pound	9.00 cents.	
Total per bale of 500 bags	25.79 cents.	
Or 0.052 cent per bag.		

SHIPPING EXPENSES.

Drayage; credited to stock department	5 cents.	
Freight; steamer to San Francisco	50 cents.	
Total per bale of 500 bags	55 cents.	
Or 0.11 cent per bag.		

COST PRICE OF 45-INCH BURLAP.

11.20 oz. jute, at $2.99\frac{88}{100}$ cents	2.10 cents.	
3.26% loss	0.07 cent.	
Expenses of spinning and weaving	1.33 cents.	
Cost per yard	3.50 cents.	

COST PRICE OF 22 x 36 GRAIN BAG.

39¾ inches 45-inch burlap, at 3.50 cents	3.85 cents.	
Expenses of sewing	0.138 cent.	
Expenses of baling	0.052 cent.	
Expenses of shipping	0.11 cent.	
Cost per bag	4.15 cents.	

OPERATING COST OF JUTE MILL FOR THE YEAR ENDING JUNE 30, 1904.

Total expenses incurred, including value of supplies on hand June 30, 1904—

Raw jute	\$212,927 57
Raw jute in process of manufacture	3,756 61
Coal	4,940 90
Jute oil	4,323 71
Sizing	1,955 47
Baling rope	104 00
Machine oil and engine supplies	610 71
Tools and repairs	21,265 91
Salaries	30,707 27
Water	785 52
Electric power	10,800 00
Freight on manufactured goods	3,634 95
Miscellaneous	969 00

Total	\$296,781 62
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Less value of supplies on hand June 30, 1904—

Raw jute	\$94,021 87
Raw jute in process of manufacture	3,397 65
Jute oil	79 50
Sizing	46 72
Baling rope	88 00
Machine oil and engine supplies	26 30
Tools and repairs	7,731 07
Miscellaneous	33 14

Total	\$105,424 25
-------------	--------------

Net operating expenses	\$191,357 37
------------------------------	--------------

Value of raw jute used	\$118,905 70
------------------------------	--------------

Add decrease in value of raw jute in process of manufacture—	
--	--

July 1, 1903	\$3,756 61	
June 30, 1904	3,397 65	
		358 96

Total value of raw jute used	\$119,264 66
------------------------------------	--------------

Expense of spinning and weaving	68,457 76
---------------------------------------	-----------

Freight on manufactured goods	3,634 95
-------------------------------------	----------

Total	\$191,357 37
-------------	--------------

MANUFACTURED GOODS SOLD DURING THE YEAR ENDING JUNE 30, 1904.

505,820 22x36 grain bags sold in advance of manufacture prior to July 1, 1903			\$28,073 01
Sold during the year—			
7,500 22x36 grain bags..... @ 5.55c.	\$416 25		
914,300 22x36 grain bags..... 5.25c.	49,418 25		
1,282,900 22x36 grain bags..... 5.40c.	69,276 60		
5,000 imperfect grain bags..... 5.00c.	250 00		
5,740 lbs. 3-ply twine..... 7.00c.	401 80		
1,791 lbs. 8-ply twine..... 5.00c.	89 55		
4,144 lbs. waste twine..... 2.00c.	82 90		
2,375 lbs. waste twine..... 3.00c.	71 30		
Lot loom waste.....	56 85		
Burlap sold to various purchasers.....	581 85		
Jute products issued to other departments.....	154 84		
		120,800 19	
		\$148,873 20	
Received in July, 1903, account judgment against Levi & Co.....		3,331 25	
Total		\$152,204 45	
Less—			
4,000 bags entered as sold and canceled after July 1, 1903, @ 5.55c.....	\$222 00		
5,000 bags entered as sold during year 1901, orders canceled and deposits forfeited by Board of Prison Directors at their meeting January 6, 1904.....	253 44		
		475 44	
Net amount of sales.....		\$151,729 01	

PROFIT AND LOSS ACCOUNT.

Sales of manufactured goods.....	\$151,729 01		
Value of manufactured goods on hand June 30, 1904, at cost price, per inventory	77,339 18		
		\$229,068 19	
Deduct—			
Net operating expenses	\$191,357 37		
Value of manufactured goods on hand July 1, 1903, at cost price, per inventory	5,753 14		
		197,110 51	
Net profit for the year.....		\$31,957 68	

GRAIN BAG STATEMENT FOR THE YEAR ENDING JUNE 30, 1904.

Bags baled during the year.....	4,508,400
Bags sold prior to July 1, 1903.....	505,820
Bags sold during the year.....	2,231,700
Bags delivered to Miller & Lux to replace bale lost (resolution of Board of Prison Directors).....	500
	2,738,020
Bags on hand unsold June 30, 1904.....	1,779,380
	4,517,400
Bags returned to stock, orders canceled, deposits forfeited.....	9,000
	4,508,400
Bags on hand July 1, 1903—perfect.....	1,560,500
Bags on hand July 1, 1903—imperfect.....	2,500
Bags baled during the year—perfect.....	4,508,400
Bags baled during the year—imperfect.....	3,000
	6,074,400
Bags shipped during the year—	
Perfect.....	3,200,900
Imperfect.....	5,000
	3,205,900
Bags on hand June 30, 1904.....	2,868,500
Bags on hand June 30, 1904—	
Sold awaiting orders for shipment.....	1,088,620
On hand, unsold.....	1,779,380
Imperfect bags on hand, unsold.....	500
	2,868,500

COMPARATIVE STATEMENT—1903 AND 1904.

(Supplement to Annual Report Jute Department, June 30, 1904.)

Operating expenses for the year ending June 30, 1903		\$193,437 09
Operating expenses for the year ending June 30, 1904		191,357 37
Decrease		<u>\$2,079 72</u>
Itemized as follows—		
	1903.	1904.
Raw jute	\$119,497 62	\$119,264 66
Coal	4,959 49	4,940 90
Jute oil	3,841 66	4,344 21
Sizing	1,713 59	1,908 75
Baling rope	8 00	16 00
Machine oil and engine supplies	928 46	584 41
Tools and repairs	13,065 42	13,534 84
Salaries	32,725 58	30,707 27
Water	828 72	785 52
Electric power	10,800 00	10,800 00
Miscellaneous	675 55	935 86
Freight on manufactured goods	4,393 00	3,634 95
Totals	<u>\$193,437 09</u>	<u>\$191,357 37</u>

Spinning and weaving expenses for year ending June 30, 1903.....	\$69,546 47
Spinning and weaving expenses for year ending June 30, 1904.....	68,457 76
Decrease	<u>\$1,088 71</u>
Spinning and weaving expenses per yard for 1903.....	1.39 cents.
Spinning and weaving expenses per yard for 1904.....	1.33 cents.
Decrease	<u>0.06 cent.</u>
Sewing expenses for 1903.....	0 145 cent.
Sewing expenses for 1904.....	0.138 cent.
Decrease	<u>0.007 cent.</u>
Baling expenses for 1903.....	0.0556 cent.
Baling expenses for 1904.....	0.052 cent.
Decrease	<u>0.0036 cent.</u>
Shipping expenses. No change.	
Cost per yard, 1903.....	3.77 cents.
Cost per yard, 1904.....	3.50 cents.
Decrease	<u>0.27 cent.</u>
Cost per bag, 1903.....	4.44 cents.
Cost per bag, 1904.....	4.15 cents.
Decrease	<u>0.29 cent.</u>
Bags sold 1903—4,162,870, at 5.55 cents.....	\$231,039 29
Bags sold 1904—2,236,700, at 5.33 $\frac{5}{100}$ cents (average).....	119,361 10
Decrease 1,926,170 bags.....	<u>\$111,678 19</u>
Bags on hand June 30, 1904—perfects.....	2,868,000
Bags on hand June 30, 1903—perfects.....	1,560,500
Increase	<u>1,307,500</u>
Bags shipped, 1903.....	3,747,200
Bags shipped, 1904.....	3,205,900
Decrease	<u>541,300</u>
Bags baled, 1903.....	4,526,200
Bags baled, 1904.....	4,508,400
Decrease	<u>17,800</u>
Jute Mill shut down for annual repairs, 1904.....	17 days
Jute Mill shut down for annual repairs, 1903.....	16 days
Increase for 1904.....	<u>1 day</u>
Equal to the manufacture of 15,000 grain bags.	
During the year ending June 30, 1904, the Jute Mill was troubled more or less from the lack of electric power; this had considerable to do with the output of the mill.	
Raw jute on hand June 30, 1904.....	7,838 bales, valued at \$94,021 87
Raw jute on hand June 30, 1903.....	7,134 bales, valued at 92,813 34
Increase	<u>704 bales, valued at \$1,208 53</u>
Raw jute, cost 1903.....	\$3 25 $\frac{25}{100}$ per cwt.
Raw jute, cost 1904.....	2 99 $\frac{83}{100}$ per cwt.
Decrease	<u>\$0 25$\frac{37}{100}$ per cwt.</u>

Correct:

IRVING BALLARD, Commissary.

It will be seen by inspecting the supplement to the annual report of the Jute Department, that the output for the two years (1903-1904) is about the same, but that the operating expenses for the year 1904 are about \$2,000 less than for the previous year, owing principally to a decrease in the salary account by combining the business of the Jute Department with the Commissary Department. There is a wide difference in the profits of the two years—of over \$20,000, accounted for in the sales of bags being nearly 2,000,000 more in 1903 than in 1904. The sales of 1904 were handicapped by carrying over 1,350,000 bags sold in 1903, into the shipments and deliveries of the year 1904. If the entire output of the mill had been sold, the profits this year would have been about the same.

This season, like others in the past, finds us with a generous surplus of grain bags on hand, which condition of affairs is an oft-repeated tale, and doubtless will continue to be so for generations to come, unless the Legislature removes some of the impediments which make the disposal of our output an impossibility. The following facts did much to render this state of affairs unavoidable this year: First, the law which compels consumers to file affidavits for each 5,000 bags and accompany orders with ten per cent of the purchase price. Second, the estimated grain crop this season in this State did not materialize, which resulted in a much smaller consumption of bags than was anticipated, and importers, rather than to carry Calcuttas over, reduced the price to \$5.25 and in some instances cut as low as \$5.00, while the price of San Quentins was fixed for the season at \$5.40, and farmers naturally gave Calcuttas the preference. As already stated, 1,350,000 bags upon which the ten per cent deposit was made, but upon which the balance was not paid—and in consequence of which the bags were not delivered—were handed over to the present administration as a surplus. There were as many bags sold and delivered this season as last, but owing to this surplus of 1,350,000, which were entered up as sold that year, it appears, at first glance, as otherwise.

The impression has existed heretofore that the sale of our production must be confined to farmers and growers of grain, and also that the disposition thereof must be confined to this State. These inferences have been found to be erroneous and unsupported by any provision of the Code, and in consequence we have sold San Quentin bags in the States of Oregon and Nevada. This discovery was not made early enough in the season to permit us to avail ourselves of the harvests in the States mentioned, but it is believed that another season our surplus can be disposed of in the States of Oregon, Washington, Nevada, and Arizona. This new territory, with the proper amendments to the law now controlling the sale of bags, will place us in a position to avoid carrying over a surplus each season, as heretofore.

FARM.

I desire to call your attention to the statement showing the receipts and disbursements by the Commissary Department with the farm for the ten months ending June 30, 1904. This is a new departure, as before this there had been no account kept with the farm separate from the Stable and Stock Department, and it was not known whether it was being maintained at a profit or at a loss.

When I took charge September 1, 1903, an inspection of the chicken and hog ranches convinced me that many repairs and improvements were essential, and considerable money was expended in that direction, notwithstanding which fact the statement shows a balance on the credit side of \$517.75, after deducting an expenditure of \$482.79 for improvements and repairs. Another year the expenditures will be very much less and a much larger profit may be reasonably anticipated.

STATEMENT OF FARM ACCOUNT FOR TEN MONTHS ENDING JUNE 30, 1904.

ISSUES FROM THE COMMISSARY DEPARTMENT.

1903.		1904.	
Sept. —To	Subsistence	Sept. —To	Tools and implements ..
	Forage		Forage
	Tools and implements ..		Ammunition
	Coal oil		Seeds
Oct. —To	Coal		Eggs (for incubator)
	Subsistence	Mar. —To	Coal oil
	Forage		Forage
	Seeds		Seeds
	Tools and implements ..		Gum trees
Nov. —To	Subsistence		Subsistence
	Forage		Coal
	Seeds	April —To	Coal oil
	Wood		Coal
	Coal oil		Tools and implements ..
	Tools and implements ..		Forage
Dec. —To	Coal		Sundries
	Coal oil		Subsistence
	Seeds	May —To	Coal oil
	Forage		Coal
	Wood		Forage
	Tools and implements ..		Seeds
	Subsistence		Tools and implements ..
			Wood
1904.			Subsistence
Jan. —To	Wood		Sundries
	Forage	June —To	Wood
	Seeds		Coal
	Coal oil		Forage
	Coal		Seeds
Feb. —To	Coal oil		Subsistence
	Wood		Sundries
	Coal		
	Subsistence	Total	\$983 29

REPORT OF STATE BOARD OF PRISON DIRECTORS.

RECEIPTS FROM FARM BY THE COMMISSARY DEPARTMENT.

1903.		1904.	
Sept. —By	Pork	Feb. —By	Vegetables
	Beef		Produce
	Veal	Mar. —By	Produce
	Vegetables		Milk
Oct. —By	Pork		Veal
	Vegetables		Vegetables
	Produce	April—By	Vegetables
Nov. —By	Pork		Milk
	Produce		Produce
	Vegetables	May —By	Vegetables
Dec —By	Vegetables		Pork
	Pork		Milk
	Hay		Produce
1904.		June —By	Hay
Jan. —By	Vegetables		Milk
	Pork		Vegetables
	Produce		Beef
Feb. —By	Pork		Produce
	Milk	Total	\$1,983 83

Articles numerated as "produce" consist mostly of eggs and poultry.

Receipts from Farm	\$1,983 83
Less supplies from Commissary	983 29
Balance	\$1,000 54
Less improvements and repairs	482 79
Balance to credit	\$517 75

IMPROVEMENTS AND REPAIRS.

1903—Sept.	\$92 00	1904—March	\$44 70
Oct.	113 57	April	3 63
Nov.	60 06	May	2 82
Dec.	148 25	June	5 55
1904—Jan.	5 32	Total	\$482 79
Feb.	6 89		

IMPROVEMENTS.

Under this head, permit me to call your attention to the fact that upon being placed at the head of this institution I made a careful inspection of all the buildings and found many repairs and alterations necessary, but the shortage of funds compelled me to select only those demanding immediate attention. Many of the State houses occupied by the subordinates were badly in need of repairs, to have postponed which would have necessitated a greater outlay the next season, and in the meantime would have subjected the inmates to much inconvenience and, in some instances, exposure during the winter months.

The so-called "Liberty Post" was a very dilapidated affair and wholly unfit for any use whatever. During rainy weather it leaked so badly that the guard stationed there was compelled to wear a rain coat. The gun was in a space at the top of the tower, and in order to reach it

the guard was compelled to crawl through a scuttle in the roof and from there through a window, and when he arrived at his destination would find the space so limited as to make effective work impossible. Aside from this, the gun was exposed to the weather and was being rapidly ruined. I removed the old post and upon its site erected a modern tower, which is commodious and effective, and which is not only serviceable in every way, but enabled me to accommodate two guards with sleeping quarters in the first story, which were badly needed.

An electric-light tower has been erected outside the wall at the water front, which fills a long-felt want. It necessitated only two extra arc lamps, the two formerly there on short poles having been transferred to the tower. This enables us to get light on top of the Jute Mill, which before was in darkness, and at the same time lights up the entire water front.

A switchboard has also been installed next the transformer under the office, which gives the electrician complete control of the arc and incandescent circuits, both inside and outside the walls. This was badly needed and is a decided improvement.

Telephones have been placed in some of the outlying guard posts, which now gives the Captain of the Guard prompt communication with same.

The electric current furnished us, for both power and lighting, is very unreliable. The Jute Mill is frequently compelled to shut down or run at half speed, and the voltage supplying the arc and incandescent circuits is so unreliable that the interruptions of both systems of lights are of such common occurrence as to cease to be matters of comment. During the winter storms the gas is always lighted in the yard, as the electric lights invariably go out.

The new warehouse, 76 by 110 feet, is well under way, and its completion will be a great relief. We were compelled to pile upon the wharf 3,500 bales of jute for which storage room could not be found. It is estimated that the new storehouse will hold about 9,000 bales of jute.

I feel it my duty to call your attention to the crowded condition of the prison, which is a subject deserving your serious consideration. On the upper tier of the north building it is necessary to put four and five prisoners in a cell designed for only one, and in others there are two. This is a very great wrong and should not be permitted. Prisoners crowded together in this manner have ample opportunity to plot and scheme and even commit felonies without detection. When the inmates are in the upper yard, where they are forced to congregate on Sundays and holidays, the limited space makes it almost impossible for them to move about, much less obtain the exercise the physical condition of many of them demand. The Legislature should be urged to appro-

prate sufficient funds to permit of the south wall being moved out far enough to make room for two more tiers of cells.

I desire to indorse the recommendation made by my predecessor in his report for both the fifty-third and fifty-fourth fiscal years, in which he urges the erection, at an early day, of a substantial gun post at the chicken ranch, on a site at or near the end of the old dike. I would amend this by selecting as the site for this post the bluff which constitutes the south extreme of the hog ranch. A modern post located at that point, furnished with a Colt automatic, high-power gun, would command the lower gate of the prison, the dock and water front, the beach both east and west, and a large portion of the valley, the prison cemetery, and the vegetable gardens where a large number of prisoners are employed. I anticipate that if we have any serious trouble it will occur at the Jute Mill, where 800 prisoners are employed, and that side of the prison is not guarded as it should be. This post, with gun and ammunition, would cost about \$2,500.

I also desire to recommend that a guard or rifle post be located at the head of the valley. This section is scarred with deep gullies made by the winter rains, up which a prisoner could crawl and be out of sight of the horse post on the west and the next tower to the east. It was by means of one of these depressions or waterways that convicts Montgomery and Kelly escaped, and several escapes have occurred in the same manner in previous administrations. This post would cost only a few hundred dollars, but would necessitate an extra guard.

I will not incumber this report with reference to the reports of the heads of the various departments, as they are full and explicit and self-explanatory.

The discipline of the prison has been satisfactory throughout the year. The officers and guards have, with few exceptions, discharged their duties in an acceptable manner.

I beg to express the thanks of myself and associate officers to your honorable body for many courtesies, as well as for valuable support and assistance during the year.

Respectfully,

J. W. TOMPKINS,
Warden.

CLERK'S REPORT.

CLERK'S OFFICE, CALIFORNIA STATE PRISON,
SAN QUENTIN, September 1, 1904.

To the Honorable the State Board of Prison Directors:

GENTLEMEN: Herewith please find a tabulated statement of the financial transactions of this prison for the fifty-fifth fiscal year, ending June 30, 1904.

Yours, very respectfully,

JAMES M. OLIVER,
Clerk.

TABLE No. 1.

Cash Receipts of the State Prison at San Quentin during the Fifty-fifth Fiscal Year, ending June 30, 1904.

1903-1904.	General Appropriation Fifty-fourth Fiscal Year.	General Appropriation Fifty-fifth Fiscal Year.	Special Appropriation Warehouse.	State Prison Fund.	Jute Revolving Fund.	United States.	Jute Department.	Commissary Department.	Hospital Department.
1903-July.....	\$9,163 92			\$17,696 74	\$2,299 60	\$192 00	\$3 90	\$388 20	\$15 60
August.....		\$7,497 65		17,485 87	1 20	2,801 30	8 80	426 77	9 45
September.....		7,500 93		17,163 37			37 50	365 49	7 90
October.....		7,501 65		17,591 49			15 90	340 55	8 95
November.....		7,500 20	\$616 95	19,759 24		2,729 85	13 25	404 96	8 00
December.....		7,499 86		18,321 88		248 50	6 10	382 18	9 50
1904-January.....		7,499 55		15,830 17			6 30	467 77	9 10
February.....		5,000 16		2,550 34			3 10	448 54	9 60
March.....		12,589 98		11,062 28		276 00	10 25	431 59	13 70
April.....		7,487 13		12,726 04	30,454 60	3,385 10	11 65	419 75	9 45
May.....		10,000 29	299 45	15,177 89	65,570 80	2,949 40	3 35	411 44	9 20
June.....		7,409 14	492 45	27,735 47	23,793 43		14 00	387 86	8 40
Totals.....		\$87,486 54	\$1,408 85	\$193,100 78	\$122,119 63	\$12,582 15	\$134 10	\$4,875 10	\$118 85
1903-1904.	Captain of the Yard's Department.	Turnkey's Department.	Stock Department.	Board and Rent.	Guards' Department.	Laundry Department.	Grain Bags.	Miscellaneous.	Totals.
Balance cash in bank July 1, 1903.....									
1903-July.....	\$73 55	\$40 95	\$35 80	\$162 20	\$3 35		\$30,109 84	\$191 23	\$256 40
August.....	89 66	49 50	27 60	183 25	5 25		4,566 35	3,527 53	60,376 88
September.....	73 10	71 05	42 15	189 05	3 60		1,998 00	213 49	36,680 18
October.....	70 90	25 85	37 95	236 05	3 90			24 15	27,665 63
November.....	1 65	23 90	57 10	213 45	75			999 88	25,857 34
December.....	1 10	17 80	46 50	210 25	2 46	\$86 10	74 93	32,490 21	32,490 21
1904-January.....	9 78	28 00	65 40	175 60		63 20	2,798 70	122 76	29,730 79
February.....	9 78	28 20	50 38	171 35	2 21	80 45	3,372 90	222 95	27,758 89
March.....	2 25	28 95	59 50	153 15	40	59 65	44,491 03	248 57	8,868 13
April.....	5 30	28 41	61 75	154 20	30	72 05	45,400 46	276 76	69,151 30
May.....	1 35	33 37	39 25	159 30	45	61 70	36,443 70	204 58	100,492 95
June.....	6 57	18 42	45 50	152 65	95	65 30	30,174 42	129 40	131,365 52
Totals.....	\$535 91	\$394 40	\$568 88	\$2,160 50	\$23 62	\$548 30	\$199,430 33	\$6,419 92	\$641,128 18

TABLE No. 2.

Cash Disbursements of the State Prison at San Quentin during the Fifty-fifth Fiscal Year, ending June 30, 1904.

1903—1904.	State Prison Fund.	Jute Revolving Fund.	Mechan- disc.	Salaries of Officers and Guards.	Salaries of Jute Mill Employees.	Freight.	Allowances Paid Discharged Prisoners.	Transporta- tion Paid Discharged Prisoners.	Transporta- tion Furn- ished Inmate Prisoners.	Gas.	Electric Lights.
1903—July ----	\$21,360 19	\$9,856 43	\$12,680 42	\$5,000 00	\$2,767 99	\$2,094 33	\$125 00	\$91 45	\$11 15	\$246 20	\$387 00
August ----	11,694 26	1 20	13,365 47	4,997 91	2,633 21	621 70	225 00	267 35	7 35	285 80	404 90
September ----	3,001 33		13,473 39	5,001 14	2,728 15	214 17	195 00	161 90		287 60	397 00
October ----	764 20		14,303 79	5,001 33	2,308 81	156 36	165 00	202 40		296 80	413 80
November ----	4,611 32		16,423 49	4,999 84	2,658 91	112 17	245 00	216 80		438 40	440 20
December ----	3,909 05		14,529 87	5,000 00	2,553 44	242 65	200 00	220 20		576 40	541 70
1904—January ----	4,422 17		11,921 21	4,999 19	2,556 83	5 00	175 00	151 75		596 00	531 40
February ----	1,317 63			5,000 16	2,550 34		210 00	228 15			
March ----	45,499 04		12,305 25	4,999 14	2,624 60	300 42	135 00	166 55	19 55	588 60	601 30
April ----	19,370 58	30,454 60	10,082 66	5,000 81	2,576 29	180 32	155 00	174 15		8 00	
May ----	3,797 98	36,519 11	12,912 08	5,000 00	2,533 67	214 39	160 00	185 25			
June ----	783 95	30,219 52	24,194 50	5,000 80	2,483 88	1,037 24	155 00	116 20		368 20	635 30
Totals ----	\$120,531 70	\$107,050 86	\$156,172 13	\$60,000 32	\$30,976 02	\$5,158 75	\$2,145 00	\$2,182 15	\$38 05	\$3,700 00	\$4,352 60
1903—1904.	Water.	Drugs and Chemicals.	General Expenses.	Prison Directors' Expenses.	Execution Account.	United States.	Advertising.	Raw Rate and Freight.	Electrical Supplies.	Electric Power.	Totals.
1903—July ----	\$753 53	\$154 78	\$369 67	\$796 95	\$25 00	\$5 35	\$179 90	\$2,299 60	\$76 61	\$900 00	\$60,131 23
August ----	971 33	125 18	282 27					1 20	31 50	900 00	36,845 98
September ----	762 39	288 29	140 11			18 05			58 46	900 00	27,578 93
October ----	747 14	213 22	150 61			18 05			131 43	900 00	25,802 94
November ----	692 76	218 74	258 43			18 05			362 10	900 00	32,506 21
December ----	478 12	271 11	109 63	470 70	25 00	36 50			123 22	900 00	30,187 49
1904—January ----	491 00	255 19	127 22		25 00	23 40			130 03	900 00	27,310 39
February ----											9,306 28
March ----	459 13	290 24	122 60						117 73	900 00	69,129 15
April ----	474 29	175 24	259 37		25 00	80 35		30,454 60	141 69	900 60	100,492 95
May ----	495 02	204 21	96 08	121 60		26 05	26 15	65,570 80	92 77	900 00	128,863 16
June ----	1,213 05	345 92	536 52		25 00	10 70		23,793 43	229 56	1,800 00	92,948 77
Balance cash in bank July 1, 04											24 70
Totals ----	\$7,447 76	\$2,542 12	\$2,452 51	\$1,389 25	\$125 00	\$218 45	\$206 05	\$122,119 63	\$1,495 13	\$10,800 00	\$641,128 18

TABLE No. 3.

Abstract of Expenses for the Fifty-fifth Fiscal Year.

Execution account	\$125 00
Discharged prisoners' allowances	2,145 00
Discharged prisoners' transportation	2,182 15
Transportation of insane prisoners	40 75
Salaries	60,000 00
Water	6,881 76
Gas	5,291 00
Electric lights	6,273 70
Prison Directors' expenses	592 30
Captain of the Yard's department	12,800 31
Turnkey's department	21,330 30
Guards' department	605 74
Hospital department	5,487 53
Laundry department	1,511 34
Stock department	5,934 37
Electrical department	457 16
Commissary department	31 61
Warden's residence—current expenses (restored to books, Journal page 182)	111 86
Warden's residence—furniture and fixtures	2,953 37
Clerk's office	1,047 91
Library	364 31
General expense	2,695 04
General repairs	4,085 02
Prison mess	\$50,873 36
Officers and Guards' mess	14,902 36
Night Guards' mess	2,728 60
Female mess	1,819 07
	70,323 39
Total expenses	\$213,290 72

TABLE No. 4.

Cost of Maintenance of Prisoners.

Average number of prisoners for the year, 1,495 $\frac{1}{2}$ —total cost	\$213,290 72
Average cost per head per month	11 88 $\frac{30}{100}$
Average cost per head per day	39 $\frac{51}{100}$
Total expenses for the year (Table No. 3)	\$213,290 72
Earnings of the jute department	\$31,957 68
Support of United States prisoners	12,720 00
Rent of State houses	1,026 00
	45,703 68
Net expenses of the prison for the year	\$167,587 04
Average cost per head per month—net	9 33 $\frac{60}{100}$
Average cost per head per day—net	31 $\frac{32}{100}$

TABLE No. 5.

Assets and Liabilities.

ASSETS.		
Buildings.....		\$503,728 70
Real estate.....		50,910 55
Reservoirs.....		31,278 55
Furniture Department.....		12,925 36
New Warehouse.....		2,598 04
Guard House.....		893 78
Commissary Department, inventory.....	\$3,640 88	
Captain of Yard's Department, inventory.....	25,388 08	
Turnkey's Department, inventory.....	12,719 61	
Guards' Department, inventory.....	13,563 17	
Hospital Department, inventory.....	3,013 90	
Laundry Department, inventory.....	2,169 60	
Stock Department, inventory.....	10,670 82	
Electrical Department, inventory.....	19,927 65	
Warden's Residence—Furniture and Fixtures, inventory.....	6,024 26	
Clerk's Office, inventory.....	2,115 66	
Library, inventory.....	1,493 59	
Prison Mess, inventory.....	5,509 80	
Officers and Guards' Mess, inventory.....	1,253 10	
Night Guards' Mess, inventory.....	315 20	
Jute Factory and equipment, inventory.....		107,805 32
Jute Department—		448,828 75
Raw jute.....	\$94,021 87	
Raw jute in process of manufacture.....	3,397 65	
Manufactured goods.....	77,339 13	
Stock.....	8,004 73	
Due from sundry purchasers of grain bags.....	21,660 59	
		204,424 02
Execution account.....	\$25 00	
Discharged prisoners' advances.....	681 45	
		706 45
Cash in State Prison Fund.....	\$11,553 47	
Cash in American National Bank of San Francisco.....	24 00	
Cash in General Appropriation Fund—Salaries.....	4,999 58	
Cash in Jute Revolving Fund.....	77,374 40	
Cash in Special Appropriation Fund—for New Warehouse.....	3,591 15	
		97,542 60
Due from United States, support of U. S. prisoners.....	\$3,186 60	
Due from U. S. R. S. "Independence," support of U. S. prisoners (marines).....	717 00	
Due from Folsom State Prison.....	89 30	
Due from sundry purchasers of commissaries and jute products.....	586 95	
		4,579 85
LIABILITIES.		\$1,466,221 97
Unpaid bills for merchandise—month of June, 1904.....	\$22,621 57	
Unpaid salaries of officers and guards.....	4,999 68	
Unpaid salaries of Jute Mill employes.....	2,499 24	
		30,120 49
Excess of Assets, June 30, 1904.....		\$1,436,101 48

TURNKEY'S REPORT.

SAN QUENTIN, CAL., June 30, 1904.

To HON. J. W. TOMPKINS, *Warden State Prison at San Quentin, California.*

SIR: I have the honor to submit herewith my annual report in tabular form, for the fifty-fifth fiscal year—July 1, 1903, to June 30, 1904.

Very respectfully,

B. H. SWAN,

Turnkey.

TABLE No. 1.

A Summary of Receipts and Discharges from July 1, 1903, to June 30, 1904.

Month.	On Hand at End of Month	1,528	1,508	1,518	1,521	1,518	1,515	1,488	1,464	1,466	1,470	1,475	1,476	-----
1903--July	37	39	0	0	0	0	0	0	0	0	0	0	0	562
August	34	56	0	0	0	0	0	0	0	0	0	0	0	3
September	39	39	0	0	0	0	0	0	0	0	0	0	0	
October	49	47	0	0	0	0	0	0	0	0	0	0	0	
November	56	62	0	0	0	1	0	0	0	0	0	0	0	
December	55	64	0	0	0	0	0	0	0	0	0	0	0	
1904--January	20	50	0	0	0	0	0	0	0	0	0	0	0	
February	27	52	0	0	0	0	0	0	0	0	0	0	0	
March	31	32	0	0	0	0	0	0	0	0	0	0	0	
April	40	32	0	0	0	0	0	0	0	0	0	0	0	
May	47	39	0	0	0	0	0	0	0	0	0	0	0	
June	39	39	0	0	0	0	0	0	0	0	0	0	0	
Totals	484	562	3	1	2	3	1	2	5	2	1	5	1	
Total Discharged	39	56	0	0	0	0	0	0	0	0	0	0	0	562
Transferred to Ione	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Transferred to Yuma, A. T.	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Sentence Commuted	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Sentence Remitted, U. S. P.	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Escaped	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Out on Additional Charge	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Out on Writ of Habeas Corpus	0	1	0	0	0	0	0	0	0	0	0	0	0	2
Executed	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Out by Order of Court	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Out for Resentence	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Out for New Trial	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Transferred to Folsom	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Transferred to Asylum	1	0	0	0	0	0	0	0	0	0	0	0	0	6
Paroled	7	8	0	0	0	0	0	0	0	0	0	0	0	40
Out as Witness	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Died	3	2	0	0	0	0	0	0	0	0	0	0	0	25
Discharged Per Act	26	42	0	0	0	0	0	0	0	0	0	0	0	343
Discharged Per Act and Restored	1	3	0	0	0	0	0	0	0	0	0	0	0	109
Total Received	38	36	0	0	0	0	0	0	0	0	0	0	0	509
Escape Returned	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Ret'd Pending Trial on Addit'l Charge	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Returned on Writ of Habeas Corpus	0	1	0	0	0	0	0	0	0	0	0	0	0	2
Transferred from Folsom	1	1	0	0	0	0	0	0	0	0	0	0	0	6
Commutation Vacated	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Returned Resentenced	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Returned Witness	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Returned by Order of Court	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Received Per Commitment	37	34	0	0	0	0	0	0	0	0	0	0	0	484
Prisoners on hand June 30, 1903														1,529
Prisoners received during the year														509
Total														2,038
Prisoners discharged during the year														562
Prisoners on hand June 30, 1904														1,476
Decrease during year														53
Monthly average														1,496 $\frac{1}{2}$

TABLE No. 2.

Nativity of Prisoners.

Foreign.	No.	United States.	No.
Africa	1	Alabama	3
At Sea	2	Alaska	1
Australia	7	Arizona	3
Austria	8	Arkansas	1
Azores Islands	2	California	390
Belgium	1	Colorado	6
British Columbia	1	Connecticut	5
Canada	29	Dakota	3
China	55	Delaware	1
Corsica	1	District of Columbia	2
Cape Verde Islands	1	Florida	1
Canary Islands	1	Georgia	12
Cuba	2	Illinois	60
Denmark	5	Indian Territory	1
England	31	Indiana	10
Finland	3	Iowa	30
France	12	Kansas	10
Germany	53	Kentucky	24
Greece	4	Louisiana	5
Holland	1	Maine	6
Ireland	44	Maryland	6
Italy	23	Massachusetts	42
Japan	11	Michigan	16
Mexico	55	Minnesota	9
New Brunswick	1	Mississippi	7
New Zealand	1	Missouri	45
Nova Scotia	2	Nebraska	11
Poland	4	Nevada	9
Portugal	1	New Hampshire	2
Russia	2	New Jersey	7
Scotland	13	New York	110
South America	6	New Mexico	3
Spain	1	North Carolina	8
Scandinavia	22	Ohio	45
Switzerland	6	Oregon	17
Turkey	2	Pennsylvania	51
Wales	3	Philippine Islands	1
West Indies Islands	2	Rhode Island	2
		South Carolina	3
		Tennessee	15
		Texas	24
		Utah	3
		Vermont	6
		Virginia	15
		West Virginia	5
		Washington	8
		Wisconsin	12
		Wyoming	1
Total	419	Total	1,057

Recapitulation.

Foreign born	419	Chinese	55
United States	1,057	Indians	7
		Japanese	12
Total	1,476	Negroes	51
		Whites	1,351
Males	1,448		
Females	28	Total	1,476
Total	1,476		

TABLE No. 3.

Crimes Committed.

Crimes.	No.	Crimes.	No.
Abduction	2	Grand larceny and priors	12
Arson, first degree	4	Grand larceny and assault with	
Arson, second degree	4	deadly weapon	1
Assault with deadly weapon	25	Grand larceny and burglary, first	
Assault with deadly weapon, and		and second degrees	1
prior	1	Incest	5
Bigamy	1	Injuring public jail	3
Burglary	33	Manslaughter	51
Burglary and injuring jail	2	Manslaughter and murder, second	
Burglary and priors	5	degree	1
Burglary and robbery	1	Murder	18
Burglary, first degree	158	Murder, first degree	126
Burglary, first degree, and priors	22	Murder, second degree	82
Burglary, first and second degrees	4	Murder, second degree, and robbery	1
Burglary, first degree, attempt	5	Murder, assault to	29
Burglary, first degree, attempt and		Murder, assault to, and prior	3
prior	3	Murder, assault to, and forgery	1
Burglary and assault with deadly		Murder, assault to, and burglary,	
weapon	1	second degree	2
Burglary, second degree	149	Murder, assault to, and assault with	
Burglary, second degree, and priors	22	deadly weapon	1
Burglary, second degree, and grand		Obtaining money by false pretenses	5
larceny	1	Passing fictitious check	10
Burglary, second degree, and as-		Perjury	7
sault with deadly weapon	1	Petit larceny and prior	23
Burglary, second degree, and rob-		Rape	38
bery	2	Rape, assault to	29
Burglary, second degree, attempt	1	Rape, assault to, and prior	2
Child stealing	1	Receiving stolen property	2
Counterfeiting	20	Robbery	140
Conspiracy	2	Robbery and prior	13
Crime against nature	10	Robbery, assault to commit	14
Crime against nature, attempt	4	Robbery, assault to commit, and	
Embezzlement	19	prior	7
Embezzlement, attempt	1	Robbery, assault to commit, and	
Extortion	1	priors	1
Felony	43	Robbery, assault to commit, and	
Felony and prior	1	assault with intent to murder	3
Forgery	66	Seduction	1
Forgery and prior	1	Sodomy	4
Grand larceny	220		
Grand larceny, attempt	4	Total	1,476

General Classification.

Crimes against property	987
Crimes against the person	413
Infamous crimes	23
Crimes not classified	53
Total	1,476

TABLE No. 4.

Terms of Imprisonment.

Term.	No.	Term.	No.
Nine months.....	1	Fifteen years.....	67
Ten months.....	1	Sixteen years.....	2
One year.....	70	Sixteen years and six months.....	1
One year and two months.....	1	Seventeen years.....	4
One year and three months.....	1	Eighteen years.....	2
One year and four months.....	1	Twenty years.....	59
One year and six months.....	23	Twenty-one years.....	5
Two years.....	124	Twenty-three years.....	1
Two years and two months.....	1	Twenty-four years.....	3
Two years and six months.....	20	Twenty-five years.....	34
Three years.....	119	Twenty-six years.....	5
Three years and six months.....	8	Twenty-seven years.....	2
Four years.....	94	Twenty-eight years.....	3
Four years and six months.....	3	Twenty-nine years and ten months.....	1
Five years.....	175	Thirty years.....	13
Six years.....	44	Thirty-one years.....	1
Six years and six months.....	2	Thirty-three years.....	1
Six years and eleven months.....	1	Thirty-five years.....	6
Seven years.....	60	Thirty-nine years.....	1
Seven years and six months.....	5	Forty years.....	8
Eight years.....	53	Forty-five years.....	1
Eight years and six months.....	1	Fifty years.....	5
Nine years.....	15	Sixty years.....	2
Nine years and six months.....	1	Sixty-six years.....	1
Ten years.....	175	Ninety-nine years.....	1
Ten years and six months.....	1	Life.....	186
Eleven years.....	3	Under death sentence.....	5
Twelve years.....	24		
Thirteen years.....	1	Total.....	1,476
Fourteen years.....	28		
<i>Recidivists, San Quentin and Folsom.</i>		<i>Terms in Other Institutions.</i>	
Second term.....	185	Whittier (California) Reformatory.....	9
Third term.....	68	Preston (California) State School.....	6
Fourth term.....	31	Indiana State Reformatory.....	1
Fifth term.....	10	Concord (Mass.) Reformatory.....	1
Sixth term.....	3	Walla Walla (Wash.) Penitentiary.....	3
Seventh term.....	3	Salem (Oregon) Penitentiary.....	3
Eighth term.....	2	Utah State Penitentiary.....	1
Total.....	302	Wisconsin State Penitentiary.....	1
First offenders.....	1,174	Sing Sing (New York) Penitentiary.....	1
		Texas State Penitentiary.....	1
Grand total.....	1,476	Alcatraz (Cal.) Federal Prison.....	1
		Total.....	28

TABLE No. 5.

Age of Prisoners When Received.

Age.	No.	Age.	No.
Fifteen	1	Forty-seven	10
Sixteen	2	Forty-eight	20
Seventeen	15	Forty-nine	9
Eighteen	42	Fifty	24
Nineteen	46	Fifty-one	10
Twenty	39	Fifty-two	13
Twenty-one	47	Fifty-three	9
Twenty-two	80	Fifty-four	11
Twenty-three	78	Fifty-five	7
Twenty-four	68	Fifty-six	7
Twenty-five	59	Fifty-seven	12
Twenty-six	66	Fifty-eight	15
Twenty-seven	67	Fifty-nine	5
Twenty-eight	67	Sixty	8
Twenty-nine	46	Sixty-one	6
Thirty	53	Sixty-two	5
Thirty-one	33	Sixty-three	3
Thirty-two	50	Sixty-four	5
Thirty-three	35	Sixty-five	0
Thirty-four	33	Sixty-six	3
Thirty-five	38	Sixty-seven	3
Thirty-six	34	Sixty-eight	2
Thirty-seven	28	Sixty-nine	3
Thirty-eight	50	Seventy	2
Thirty-nine	28	Seventy-one	1
Forty	35	Seventy-two	4
Forty-one	22	Seventy-three	1
Forty-two	23	Seventy-four	1
Forty-three	25	Seventy-six	4
Forty-four	16		
Forty-five	23	Total	1,476
Forty-six	18		

Age of youngest prisoner now here, 17; of oldest, 80.

Educational Status.

Can read and write English	1,310
Can not read and write English	166
Total	1,476
Illiterate	131

TABLE No. 6.
Counties Represented.

Counties.	No.	Counties.	No.
Alameda	59	San Benito	9
Amador	8	San Bernardino	21
Butte	23	San Diego	28
Calaveras	9	San Francisco	357
Colusa	4	San Joaquin	62
Contra Costa	14	San Luis Obispo	11
Del Norte	1	San Mateo	18
Fresno	61	Santa Barbara	13
Glenn	2	Santa Clara	50
Humboldt	9	Santa Cruz	15
Kern	39	Shasta	32
Kings	18	Sierra	5
Lake	3	Siskiyou	14
Los Angeles	184	Solano	23
Madera	6	Sonoma	20
Marin	4	Stanislaus	23
Mariposa	6	Sutter	5
Mendocino	13	Tehama	8
Merced	8	Trinity	4
Monterey	24	Tulare	24
Mono	1	Tuolumne	11
Napa	15	Ventura	18
Nevada	6	Yolo	3
Orange	10	Yuba	13
Placer	23	United States prisoners	73
Plumas	3		
Riverside	22	Total	1,476
Sacramento	41		

United States Prisoners.

<i>United States Districts.</i>		<i>United States Naval Stations.</i>	
Alaska	11	China	5
Arizona	2	Korea	1
Idaho	4	Mare Island	8
Washington	6		
Northern California	30	Total	14
Southern California	8	Total United States Districts	59
Total	59	Total United States prisoners	73

TABLE No. 7.

Occupation of Prisoners Before Commitment.

Occupations.	No.	Occupations.	No.	Occupations.	No.
Accountant	5	Electrician	17	Painter	40
Actor	1	Engineer, civil	3	Paperhanger	3
Amalgamator	1	Engineer, mechanical	16	Patternmaker	1
Apiarist	1	Engraver	1	Peddler	4
Architect	3	Farmer	87	Photographer	3
Artist	1	Fireman	28	Physician	2
Baker	12	Fisherman	2	Pianomaker	1
Barber	34	Florist	2	Plumber	14
Bartender	13	Foundryman	2	Porter	4
Blacksmith	24	Fruit-picker	3	Preacher	1
Blockmaker	1	Gardener	11	Printer	13
Boilermaker	12	Gasfitter	2	Railroad man	4
Bookkeeper	15	Glass-beveler	1	Real estate agent	4
Bootblack	2	Gunsmith	1	Restaurateur	2
Boxmaker	4	Harnessmaker	3	Saddler	1
Brewer	1	Horseshoer	5	Sailor	46
Bricklayer	6	Hostler	22	Salesman	8
Butcher	15	Hotelkeeper	5	Sailmaker	1
Butler	1	Housekeeper	8	School teacher	3
Cabinetmaker	6	Hunter	3	Shoemaker	28
Canmaker	3	Insurance agent	5	Shopgirl	1
Carpenter	43	Ironmolder	7	Sign painter	3
Carriage painter	2	Interpreter	1	Solicitor	1
Carriage trimmer	1	Jack-screw	1	Stage driver	1
Chair caner	1	Jeweler	2	Steamfitter	2
Chemist	1	Laborer	289	Steward	4
Chiropodist	1	Laundryman	18	Stenographer	2
Cigarmaker	3	Lawyer	4	Stonecutter	2
Clerk	38	Lineman	3	Stonemason	6
Coachman	2	Locksmith	2	Stovefitter	1
Confectioner	2	Longshoreman	3	Student	2
Consular clerk	1	Lumberman	2	Surveyor	1
Contractor	1	Machinist	27	Tailor	25
Cook	71	Merchant	4	Tanner	2
Cooper	2	Milliner	1	Teamster	66
Cowboy	2	Miner	68	Telegrapher	4
Dairyman	4	Musician	5	Upholsterer	2
Dishwasher	4	No occupation	38	Vaquero	5
Dog trainer	1	Nurse	13	Veterinary doctor	6
Dressmaker	2	Nurseryman	1	Waiter	84
Druggist	6	Oiler	2		
Dyer	1	Oil driller	3		
Editor	1	Optician	1	Total	1,476

Recapitulation.

Professions	35
Mechanical trades	341
Other trades and occupations	773
Laborers	289
No occupation (minors, etc.)	38
Total	1,476

TABLE No. 8.

Paroled Prisoners.

TABLE "A"—ACCOUNTS FOR THE WHOLE NUMBER OF PAROLED SINCE THE LAW WAS PASSED. (1893.)

Total paroles granted (males, 157; females, 1).....		158
Honorably discharged and restored to citizenship.....	106	
Died while on parole.....	4	
Sentence commuted and discharged.....	1	
Pardoned.....	4	
Parole violated, but not extraditable.....	1	
Parole violated, not yet apprehended.....	4	
Parole violated, and prisoner returned.....	6	
Parole violated, and prisoner returned on additional charge.....	1	
Now on parole, but confined in insane asylum.....	1	
Now on parole, and reporting regularly.....	30	
	158	158

Paroles honored, 93 per cent; paroles violated, 7 per cent.

TABLE "B"—SHOWS OPERATIONS DURING THE FIFTY-FIFTH FISCAL YEAR.

On parole July 1, 1903.....	29	
Paroled during year.....	40	
Total.....		69
Discharged and restored to citizenship.....	33	
Died.....	1	
Total.....		34
Remaining on parole June 30, 1904.....		35
Those now on parole reporting regularly.....	30	
Those now on parole not reporting.....	4	
Those now on parole confined in asylum.....	1	
Total.....		35

TABLE No. 9.

Clothing Issued to Prisoners from July 1, 1903, to June 30, 1904.

1903—1904.	Citizens' Clothing.					Prisoners' Clothing.																
	Coats.....	Vests.....	Pants.....	Shirts.....	Hats.....	Shoes.....	Coats.....	Pants.....	Vests.....	Shirts.....	Caps.....	Undershirts.....	Drawers.....	Socks.....	Shoes.....	Slippers.....	Hickory Shirts.....	Boots.....	Blankets.....	Beds.....	Bed Ticking (Yards).....	Repairs.....
1903—July.....	15	17	20	4	26	92	82	237	92	304	96	248	245	506	133	23	12	1	44	38	0	419
August.....	37	37	41	21	45	85	97	234	110	249	110	259	261	626	135	9	2	0	38	35	515¾	390
September.....	25	26	31	23	27	41	96	254	106	244	112	264	262	509	145	19	12	2	61	49	0	354
October.....	30	30	32	12	39	46	110	288	126	293	150	310	316	660	184	21	10	2	39	49	0	375
November.....	40	40	42	22	48	54	90	221	93	243	137	270	272	531	199	12	10	3	39	56	0	352
December.....	34	33	38	24	36	44	84	279	86	268	132	306	313	584	146	9	8	3	52	57	514¾	406
Totals 1st half.....	181	183	204	106	221	362	559	1,513	613	1,601	737	1,657	1,669	3,416	942	93	54	11	273	284	1030½	2,296
1904—January.....	29	30	29	19	36	38	63	259	69	230	122	253	254	556	142	21	9	1	34	20	0	336
February.....	37	37	41	20	48	52	57	191	65	185	96	206	209	457	120	6	2	0	8	27	0	367
March.....	19	21	24	9	29	38	67	230	71	210	112	227	230	495	145	4	10	5	4	33	0	459
April.....	20	24	25	10	30	44	72	295	85	275	121	298	301	645	232	8	21	2	25	40	0	439
May.....	35	37	35	21	39	35	71	244	89	237	112	261	261	552	186	14	18	0	41	47	0	337
June.....	31	30	31	8	31	28	73	230	92	222	102	237	238	491	163	12	5	0	38	39	0	395
Totals 2d half.....	171	179	185	87	213	235	403	1,449	471	1,359	665	1,482	1,493	3,196	988	65	65	8	150	206	-----	2,533
Totals for year.....	352	362	389	193	434	597	962	2,962	1,084	2,960	1,402	3,139	3,162	6,612	1,930	158	119	19	423	490	1030½	4,629

Average Cost per Man for the Year.

Discharged prisoners, citizens' clothing.....	\$5 08
Convict clothing and bedding.....	10 48

TABLE No. 10.
Photographs of Prisoners.

	1903.					
	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Regular monthly reports to Sheriffs, Chiefs of Police, etc.	629	578	833	882	1,008	990
To Sheriffs, Chiefs of Police, etc., by special request.	51	27	58	62	76	42
Escaped prisoner	800	-----	800	-----	-----	1,025
Recidivists about to be discharged, to Sheriffs, etc.						
Totals	1,480	605	1,691	944	1,084	2,057

	1904.					
	Jan.	Feb.	Mar.	April.	May.	June.
Regular monthly reports to Sheriffs, Chiefs of Police, etc.	360	513	637	760	940	780
To Sheriffs, Chiefs of Police, etc., by special request.	47	53	59	41	46	54
Escaped prisoner	-----	-----	-----	450	-----	-----
Recidivists about to be discharged, to Sheriffs, etc.			516	-----	-----	630
Totals	407	566	1,212	1,251	986	1,464

Total photographs made and distributed during year, 13,747.
Average cost of each photograph, 2.58 cents.

TABLE No. 11.
Life Prisoners.

Crimes.			No.	Actual Time Served—Life Prisoners Now Here.	No.
Burglary, first degree, and priors			1	Thirty years	1
Felony			3	Twenty-eight years	2
Murder, first degree			124	Twenty-four years	2
Murder, second degree			20	Twenty-three years	3
Murder, second degree, and robbery			1	Twenty-two years	6
Murder			12	Twenty-one years	3
Rape			3	Twenty years	4
Robbery			15	Nineteen years	3
Robbery and prior			5	Eighteen years	6
Robbery and petit prior			1	Seventeen years	6
Train-wrecking			1	Sixteen years	6
				Fifteen years	2
Total			186	Fourteen years	5
				Thirteen years	3
				Twelve years	5
Serving first term	163	Chinese	25	Eleven years	5
Serving second term	15	Indians	2	Ten years	12
Serving third term	3	Negroes	4	Nine years	13
Serving fourth term	3	Whites	155	Eight years	7
Serving fifth term	2			Seven years	13
				Six years	12
Total	186	Total	186	Five years and less	67
				Total	186
Females (white)			3		
United States prisoners			7		
All others			176		
Total			186		

CAPTAIN OF THE YARD'S REPORT.

SAN QUENTIN, CAL., July 1, 1904.

To HON. J. W. TOMPKINS, *Warden State Prison at San Quentin, California:*

SIR: I have the honor to submit herewith my annual report for the fiscal year ending June 30, 1904.

H. HARRISON,
Captain of the Yard.

LABOR REPORT FOR THE FISCAL YEAR ENDING JUNE 30, 1904.

Productive Class.

REPORT OF STATE BOARD OF PRISON DIRECTORS.

Departments.	1903.						1904.						Departmental Totals for the Year 1903-04.
	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	June.	
Jute Department.....	20,079	20,063	19,502	20,986	19,450	16,116	19,257	18,065	20,994	19,544	19,087	20,253	233,386
Engineer's Department.....	26	26	25	27	24	26	25	24	27	26	25	26	307
Foundry Department.....	1,040	1,068	1,075	1,234	1,091	1,142	1,039	936	1,092	1,028	914	918	12,577
Stock and Stable Department.....	425	423	554	516	456	482	472	551	589	568	589	570	6,195
Female Department.....	674	682	643	651	607	626	709	782	847	800	893	847	8,757
Wheelwright's Shop.....	25	26	24	27	24	26	25	24	27	26	25	26	305
Upholsterer's Shop.....	63	64	75	77	72	78	63	48	54	52	50	52	748
Locksmith's Shop.....	26	26	25	26	24	26	25	24	27	26	25	26	306
Carpenter's Shop.....	570	579	586	654	621	688	692	601	644	620	586	542	7,383
Plumber's Shop.....	85	62	60	62	58	50	30	29	27	--	12	60	535
Cooper's Shop.....	26	26	25	27	24	26	25	24	27	26	25	26	307
Paint Shop.....	130	135	145	204	192	165	170	168	165	137	140	156	1,907
Tin Shop.....	159	151	173	202	180	194	150	144	162	156	125	114	1,910
Coal Yard.....	26	26	25	27	24	26	25	24	27	30	26	316	316
Vegetable Garden.....	670	665	604	732	608	599	661	649	609	525	517	572	7,411
Flower Garden.....	653	652	663	661	557	556	540	551	589	518	572	604	7,116
Improvements.....	130	130	224	201	141	142	125	120	135	115	78	52	1,593
Stevodore.....	614	587	471	439	391	371	350	308	378	423	372	404	5,108
County Road Gang.....	727	658	532	674	576	622	617	573	648	620	621	573	7,441
Chicken Ranch.....	62	65	82	66	60	60	67	87	93	66	84	90	882
Hog Ranch.....	58	62	60	62	59	60	60	58	62	66	62	60	729
Blacksmith Shop.....	130	130	110	108	78	78	75	72	81	87	50	52	1,051
Laundry Department.....	1,009	1,022	1,004	1,081	953	1,248	1,272	1,008	1,123	1,111	1,081	1,169	13,081
Shoe Shop.....	523	522	453	508	471	520	483	473	545	552	514	526	6,100
Tailor Shop.....	654	655	504	734	728	796	752	720	780	756	693	728	8,500
Totals	28,584	28,505	27,644	29,986	27,469	24,723	27,709	26,063	29,748	27,878	27,166	28,476	333,951

LABOR REPORT FOR THE FISCAL YEAR ENDING JUNE 30, 1904.

Non-Productive Class.

Departments.	1903.						1904.						Departmental Totals for the Year 1903-04.
	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April.	May.	June.	
Warden's Office	90	93	60	77	89	60	80	87	93	68	62	60	919
Captain of Yard's Office	290	310	339	341	307	240	240	232	248	240	244	222	3,253
Clerk's Office	62	62	60	62	60	60	40	29	31	30	31	53	580
Captain of Guard's Office	62	62	60	62	60	56	60	58	62	60	62	60	724
Commissary Department	246	268	282	248	240	223	210	203	217	232	200	208	2,777
Library Department	130	137	170	170	204	214	270	264	335	401	348	240	2,843
Barber Shop	397	403	403	418	421	440	450	435	449	433	434	424	5,107
Lamp-lighter	58	62	60	62	48	50	60	58	62	60	62	60	702
Bath Tank Tender	31	31	30	31	30	30	30	29	31	30	31	30	364
Cell and Room Tenders	1,085	1,102	1,104	1,147	1,092	1,108	1,103	984	1,116	1,086	1,081	990	12,998
Gate and Door Tender	369	338	320	338	286	311	300	348	379	360	414	405	4,168
Hospital Nurses	280	280	262	254	224	210	210	203	217	210	210	210	2,770
Sweepers	319	312	298	324	288	285	299	333	341	317	315	286	3,717
Scavengers	865	840	1,051	1,085	996	1,331	1,174	998	986	936	1,052	1,078	12,392
Whitewashers	208	206	194	200	174	182	161	70	54	52	50	52	1,603
General Mess	2,326	2,347	2,332	2,460	2,375	2,048	2,440	2,324	2,474	2,411	2,542	2,447	28,526
Outside Kitchen	813	794	710	718	744	556	562	642	682	681	713	690	8,305
Hospital Kitchen	82	62	60	62	60	60	60	58	62	60	62	60	748
House Servants	1,036	967	915	1,037	896	788	765	770	796	729	697	601	9,997
Electricians	107	104	120	128	110	130	109	116	135	130	125	137	1,451
Photographers	70	91	90	111	120	92	91	87	93	87	64	60	1,056
Messengers	62	62	60	62	43	60	60	58	62	60	62	60	711
Guards' Department	186	185	172	198	180	185	190	174	186	180	186	171	2,193
Cripples and Insane	729	682	633	638	510	499	476	522	551	472	492	518	6,722
Doctor, Daily Excuses, Dungeon, etc.	775	674	636	526	488	531	435	357	410	476	649	466	6,423
Patients in Hospital	876	814	712	790	747	874	808	784	827	793	741	723	9,489
To be Executed	292	279	270	301	300	267	234	210	170	179	244	196	2,942
Unemployed	1,343	1,373	814	964	973	1,098	979	816	1,062	1,251	1,183	1,116	12,972
Totals	13,189	12,933	12,184	12,814	12,065	11,988	11,896	11,249	12,131	12,024	12,356	11,623	146,452

CAPTAIN OF THE GUARD'S REPORT.

SAN QUENTIN, CAL., July 2, 1904.

To HON. J. W. TOMPKINS, *Warden State Prison at San Quentin, California:*

SIR: I herewith tender my annual report for the year ending June 30, 1904.

The first two months of said year was conducted under the Wardenship of M. G. Aguirre, the last ten months under your Wardenship. During all of said time I have done my best to keep the Guards' Department in good condition, and have been as economical with the expenses of said department as possible.

The character and demeanor of the guards, with but few exceptions, have been excellent.

The care of the guards has been carefully looked after; and with but a few complaints about the food served them, and the unfortunate appearance of bedbugs, which has been given prompt attention, they have been well satisfied.

The question of opium in its varied forms has been a menace to the prison, and occasionally the article has been found in the prison. The many avenues by which it can be brought in makes it very hard to keep it out. In the searching process used for a long period it is hard to discover the drug, as it can be carried in small quantities and concealed on the carrier's person; and unless the prisoners are stripped, the carrier of the drug can successfully pass the searching guards. Sufficient time can not be taken to make a thorough search of each prisoner, owing to the large number working on the outside and the short time allowed to get them into line for their meals. I have done the best I could under the existing circumstances; but with more time allowance, a better and closer search could be made. I can suggest but one sure way of overcoming this smuggling of opium, and that is to have arranged in a room a change of clothing for all those working on the outside. This would give plenty of time to search the clothes thoroughly.

As to the condition of the arms of the prison, I would report as follows: We have four quick-firing guns, two of which have been defective for the past five years. One of these has been retired to the Armory and is not in use; the other, on Post 5, better known as Guard White's

post, is in poor condition and needs a general overhauling. The guns on Post 8 (known as Guard Bailey's post) and on Post 4 (known as Guard Cronin's post) are in good condition. The gatling gun on Post 3 (known as Guard Hagadorn's post) is in good condition, but it does not belong to the prison, as it was only loaned to the prison by Governor Henry T. Gage. So we have only two guns of this type that are fitted for the work of guarding the prison. This should be given attention as soon as possible.

As to the small arms: The rifles in use are good and serve their purpose well. The shotguns in use are not serviceable, as several are defective and old; they will shoot, but cannot be relied on in case of an emergency. The pistols are not in the best of condition, having been in use for a number of years, and need a general overhauling to make them what they should be.

The target practice of the guards has been carried on as per your instructions, and I am pleased to state that there is a decided improvement in marksmanship, and great interest is being taken by all, both officers and guards.

Two important subjects which are talked over at all times and should be assisted in every way, are, first, an increase of wages for the guards, and second, the repeal of the law which restricts the making of the uniforms for officers and guards at the prison. Both of these matters, if carried through, would be a great help to the employés and also a benefit to the institution.

A storeroom for general repairs and Guards' Department stock is very necessary, and could be built at very small expense next to the hose house located south of the officers and guards' kitchen. At present all the material is kept in the hose house and prevents the use of said house for the purpose intended.

Attached are the annual reports of the prisoners received and discharged; also number of visitors shown through the prison, and number of prisoners given receptions during the year.

I am pleased to state that the mail matters and Wells, Fargo & Co.'s Express packages have received prompt attention and give general satisfaction.

In conclusion, will state that, with the exception of being short on the guard line at various times, everything has moved along very satisfactorily, and a continuation of same will be my utmost endeavor.

Yours most respectfully,

JAMES RUSSELL,
Captain of the Guard.

TABLE No. 1.

Visitors from July 1, 1903, to June 30, 1904.

<i>Visitors to See Prisoners on Receptions.</i>		<i>Visitors Shown Through Prison.</i>	
1903—July	298	1903—July	580
August	367	August	711
September	220	September	211
October	226	October	176
November	179	November	104
December	236	December	158
1904—January	175	1904—January	146
February	182	February	133
March	173	March	111
April	214	April	116
May	198	May	121
June	219	June	199
Total	2,687	Total	2,766
Total visitors to the prison		5,453	

TABLE No. 2.

Prisoners Received and Discharged.

<i>Prisoners Received.</i>		<i>Prisoners Discharged.</i>	
1903—July	38	1903—July	39
August	36	August	56
September	49	September	39
October	50	October	47
November	59	November	62
December	61	December	64
1904—January	23	1904—January	50
February	28	February	52
March	34	March	32
April	43	April	39
May	48	May	43
June	40	June	39
Total	509	Total	562

Total number of prisoners on hand July 1, 1903

1,529

Loss for year

53

On hand July 1, 1904 (Males, 1,448; Females, 28)

1,476

RESIDENT PHYSICIAN'S REPORT.

SAN QUENTIN, CAL., July 1, 1904.

To HON. J. W. TOMPKINS, *Warden State Prison at San Quentin, California:*

SIR: Herewith is presented the annual report of the Medical Department for the fiscal year ending June 30, 1904.

We have fortunately been free from any epidemic diseases. The death rate from all causes has been small, considering the population handled, being only thirty, including executions, in a population of over two thousand.

I would call your attention to the large percentage of diseases of the respiratory organs, about fifty per cent of the deaths occurring having been from tuberculosis. The bad ventilation of the Jute Mill causes the air to be full of fine particles of dust which injure the air passages, leaving a fertile field for the tubercle bacillus. I would suggest that some form of suction ventilator be installed over the large dust-producing machines to draw up the dust and discharge it into the air over the roof of the mill. I think you will find this a great advantage, not only in reducing the pulmonary troubles, but also in lessening the objection of prisoners to work in the mill.

I will also ask that the hospital beds be furnished with spring mattresses. The patients are frequently compelled to lie in their beds for weeks at a time, and lying on these rigid slat beds is a hardship for a sick man and in wasting diseases it is the principal cause of very troublesome bed sores.

Respectfully yours,

P. F. CASEY, M.D.,

Resident Physician.

EXHIBIT A.

*Diseases Treated at Hospital Each Month during Fiscal Year ending
June 30, 1904.*

Diseases.	1903.						1904.						Total
	July	August	September	October	November	December	January	February	March	April	May	June	
Amputations	2			1	1	1	1	1	1	2	2		12
Abscess	2	1	2	1	2	1	2	2	2	2	2	1	18
Abdomen wound	1												1
Attempt suicide	1		1	2					1	1			6
Asthma		1	1	1	1	2	2	1	1	1	1	1	13
Autotoxæmia			1				1	1	1		2		6
Appendicitis						1							1
Albumenuria				1									1
Bilious fever	8	7	10	12	7	8	10	13	5	5	6	6	97
Bronchitis				1	1	1			1	1			5
Bright's disease							1	1	1	1	1	1	6
Congestion of lungs	1												1
Collapse		1	1										2
Constipation			1										1
Circumcision			1	1									2
Colitis				1	1								2
Consumption						2		1					3
Conjunctivitis									1	1			2
Cuts										1			1
Contusions											1		1
Dysentery	1	2	1										4
Dyspepsia			1				1						2
Diarrhea							1	1					2
Dropsy										1			1
Epilepsy	1	1	2	1	1	1	1	2	1	1	1	1	14
Erysipelas	1												1
Entiritis						1	1	1					3
Epididymitis						1	1	1	1	1			5
Fistula	1												1
Fractured skull and leg	1	1	1										3
Fistula in ano					1	1							2
Fracture radius									1	1	1	1	4
For observation										1	1	1	3
Gastritis	1					2	2	2	3	1	1		12
General debility	7	5	6	7	7	7	8	9	8	9	8	9	90
Gummata						1							1
Gunshot wound						1	1	1					3
Heart disease			1										1
Hernia											1	1	2
Hydrocele						1							1
Herpes									1	1	1		3
Hepatitis										1	1	1	3
Iritis						2	2	2	2				8
Influenza		1			3		1	1					7
Indigestion	2				2	2							6
Jaundice										1			1
Locomotor ataxia	3	3	3	3	3	3	2	2	2	2	2	2	30
Lacerated finger	1												1
Lumbago					1	1							2

EXHIBIT A—Continued.

Diseases.	1903.						1904.						Total
	July	August	September	October	November	December	January	February	March	April	May	June	
Lacerated foot					1	1							2
Malaria	1	1			1		1	1	1	1	1	1	9
Mania											1	1	2
Meningitis	1	2	1										4
Myositis											1		1
Nephritis	2	1											3
Obesity	1	1	1	1	1	1	1	1					8
Otitis				1									1
Phthisis	4	4	4	4	4	2	2	2	2	2	3	3	36
Paralysis	1	1	1	1	1	1	1	1		1	1	1	11
Pneumonia	1									1	1	1	4
Pharyngitis	1						1		1	1		1	5
Pleurisy				1	1	1	2	1	2	2	1	1	12
Piles				4	2							1	7
Polyuria									1				1
Phlebitis									1				1
Plastic operation												1	1
Retinitis	1	1	1	1	1	1	1	1	1	1	1	1	12
Remittent fever		1	1										2
Rheumatism		1		1	1	1					1		5
Rhinitis						1							1
Syphilis	1	1	1	1				1					5
Suppressed urine	1												1
Scalded foot		1											1
Stomatitis		1				1							2
Stricture								1	1				2
Sciatica				1	1								2
Spinal curvature												1	1
Sprains					1				2				3
Swollen glands				1	1								2
Tuberculosis	2	2	1	1	1	1	1	1	1	1	1		13
Tape worm		1	1		1								2
Traumatic orchitis					1	1							2
Tonsilitis						1		2	1	1			5
Unclassified	1				1			2	1				5
Urticaria	1												1
Uremia									1				1
Wound in abdomen	1				1	1							3
Totals	55	42	45	50	51	54	46	56	49	46	44	38	576

EXHIBIT B.

Resumé of Work in Medical Department.

1903.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Calls on physician	2,041	2,735	1,569	1,814	1,475	1,510	11,144
Daily average	85	91	65	60	61	63	-----
Visited in cells	66	115	44	38	7	19	289
Daily average	2	4	1	1	-----	1	-----
Excused from work	146	173	83	72	72	50	596
Daily average	6	6	3	2	3	2	-----
Patients admitted	40	19	25	36	19	35	174
Patients discharged	39	22	29	28	16	35	169
Monthly invalid list	7	8	7	3	2	-----	-----
Monthly deaths	4	2	2	1	2	5	16
1904.	Jan.	Feb.	Mar.	April.	May.	June.	Total.
Calls on physician	2,051	1,565	1,717	2,472	2,027	2,091	11,923
Daily average	68	65	71	82	84	86	-----
Visited in cells	7	7	19	16	11	30	90
Daily average	-----	-----	1	1	-----	1	-----
Excused from work	29	136	128	71	72	62	498
Daily average	1	3	5	3	3	2	-----
Patients admitted	19	25	21	20	15	14	114
Patients discharged	15	24	16	19	16	15	105
Monthly invalid list	1	1	3	3	3	2	-----
Monthly deaths	2	6	1	4	-----	1	14

EXHIBIT C.

Number and Names of Prisoners who Died, with Date and Cause of Death.

No.	Name.	Cause.	Date of Death.
20115	F. C. Fischer	Executed	July 14, 1903
19816	Joe Molino	Phthisis	July 10, 1903
19710	Ed. Rennie	Phthisis	July 17, 1903
19548	Frank U. Bello	Phthisis	July 19, 1903
17608	J. L. Crow	Phthisis	Aug. 23, 1903
20051	L. S. Guy	Phthisis	Aug. 24, 1903
17888	L. Carline	Phthisis	Sept. 17, 1903
14745	G. W. A. Maddox	Heart failure	Sept. 28, 1903
17535	H. E. Arnett	Meningitis	Oct. 19, 1903
19798	Day-Kan-Teen	Gummata of the brain	Nov. 10, 1903
19314	James Lull	Embolism of the heart	Nov. 24, 1903
19405	McElwain	Phthisis	Dec. 1, 1903
20341	Julius Martinez	Executed	Dec. 11, 1903
19588	Wm. B. White	Phthisis	Dec. 18, 1903
18620	Bert Ross	Executed	Dec. 18, 1903
20101	Geo. Bermudas	Meningitis	Dec. 21, 1903
18405	J. Breen	Gastric ulcer	Jan. 4, 1904
20475	Elias Muscat	Heart disease	Jan. 7, 1904
19076	Jas. Sweeney	Unknown—found dead in cell	Feb. 10, 1904
18747	Peter Nelson	Syphilis	Feb. 15, 1904
20052	A. Capistrano	Consumption	Feb. 26, 1904
19723	Chas. Wardrip	Executed	Feb. 26, 1904
18470	M. Gomez	Consumption	Feb. 28, 1904
19356	R. Huffner	Consumption	Feb. 29, 1904
19618	A. K. Zeigler	Uræmia	Mar. 20, 1904
18521	S. Thompson	Phthisis	Apr. 5, 1904
18468	Thomas Curley	Consumption	Apr. 15, 1904
14540	Wong Ah Wah	Dropsy and heart failure	Apr. 22, 1904
19509	Felipe Yorba	Phthisis	Apr. 26, 1904
18336	Francisco Ochoa	Executed	June 10, 1904

EXHIBIT D.

Number of Deaths each Month, with Classified Totals.

Cause.	1903.						1904.						Total
	July	August	September	October	November	December	January	February	March	April	May	June	
Executed	1					2		1				1	5
Embolism of the heart					1								1
Found dead in cell								1					1
Gummata of the brain					1								1
Gastric ulcer							1						1
Heart disease			1				1			1			3
Meningitis				1		1							2
Phthisis	3	2	1			2		3		3			14
Syphilis								1					1
Uræmia									1				1
Totals	4	2	2	1	2	5	2	6	1	4		1	30

EXHIBIT E.

Persons Executed during the Fiscal Year ending June 30, 1904.

No.	Name of Prisoner.	Date of Execution.
20115	F. C. Fisher	July 14, 1903
20314	Julius Martinez	December 11, 1903
18620	Bert Ross	December 18, 1903
19721	Charles Wardrip	February 26, 1904
18336	Francisco Ochoa	June 10, 1904

BIENNIAL REPORT

OF THE

WARDEN OF FOLSOM STATE PRISON

FOR THE

FIFTY-FOURTH AND FIFTY-FIFTH FISCAL YEARS, ENDING JUNE 30, 1904.

WARDEN'S REPORT.

STATE PRISON AT FOLSOM, July 1, 1904.

To the Honorable the State Board of Prison Directors:

GENTLEMEN: I have the honor to submit herewith the biennial report of the operations of the Folsom State Prison for the fifty-fourth and fifty-fifth fiscal years.

Having assumed charge of the prison on December 1, 1903, you are respectfully referred to the statistics furnished from the records for information prior to that time.

The financial condition of the prison at the close of the year is fully set forth in the report of the Clerk, submitted herewith. You will also find submitted statistical tables of the General Overseer and Physician, showing the operations of their departments.

The average number of convicts imprisoned during the fifty-fourth fiscal year was 783.19; for the fifty-fifth fiscal year, just ended, we had an average population of 815.29. On December 1, 1903, our prison population was 753; on June 30, 1904, it was 907; an increase of 154 in seven months. This increase has necessitated additions to our general guard force, and a larger outlay for maintenance.

Although I have endeavored to keep the maintenance expenditure down to the lowest possible point, yet, owing to the marked advance in the cost of necessities and staple articles and supplies, together with the absolute necessity for repairs in the various departments of the prison, in order to keep them in operation, I have found the appropriation for maintenance inadequate to meet our wants, and have been forced to draw upon the Folsom Prison Fund to satisfy our requirements.

Another matter of expense that has fallen upon my administration is the cost of the trials of the recaptured prisoners incurred for the murder of Guard W. L. Cotter during the "break" of July 27, 1903. There has been paid out of the prison fund for rewards, expenses, and costs of trials, the sum of \$2,272.85 prior to December 1, 1903; since then, the sum of \$4,640; a total of \$6,912.85—all resulting from the "break" of July 27, 1903; and the end is not in sight. Sacramento County has a claim approximating \$9,135 for the costs of the trials of convicts Murphy and Eldridge that has not yet been presented. There are now four convicts awaiting trial for murder and escape connected

with this disastrous "break," the costs of which trials will have to be paid out of Folsom Prison funds, or appropriations.

When I took possession of the office of Warden of this prison I regret to state that I found many repairs imperative and immediately necessary; the stock of staple supplies in the commissary was depleted; machinery and tools of all kinds were worn to the limit. Many new residences for employes of the prison had been erected, while the buildings in use for purely prison purposes had been allowed to deteriorate for want of timely attention and repair. Engines, boilers, derricks, etc., were in the same condition. My predecessor in office had fortunately been able to find sufficient timber growing upon the land owned or rented by the prison to obviate the necessity of purchasing wood for fuel almost the entire term of his office. Upon my arrival I found no timber that could be cut, and, there being no supply of wood on hand, I was forced to go into the open market and purchase wood at winter prices, and to turn to the use of coal because of the limited supply of wood at this season of the year (midwinter). The difference in the cost of maintenance is quite large owing to this fact alone. Our supply of provender for stock was in the same condition. I have carefully estimated that we will need an annual appropriation of \$80,000 for maintenance. Our prison population is steadily increasing, and the cost of supplies has risen and is not likely to be lower.

One lesson has been taught me in studying the conditions of this prison, and that is, our guard force should be strengthened. The convicts are worked in the open and are scattered over the river front and about the prison grounds. The number detailed to work in the rock-crusher plant, and adjacent quarries, averages 325, and the armed force guarding them is only four in number, with one horse guard across the river. While the number of prisoners working in our granite quarry is sixty on an average, the armed guard force is but three. In my opinion this is not a large enough force to prevent a concentrated "break" for liberty, or for supervision over convicts unrestrained by retaining walls. It furthermore appears to me most forcibly that the salary attached to the position of guard is not large enough to attract men of proper qualifications. I find it extremely difficult to obtain competent men to do guard duty at the salary paid; and many of my appointments resign to accept better paid positions elsewhere, after a short term of service here. Temporary employes do not subserve the best interests of the prison in any of its branches. Well-trained, experienced and trustworthy guards are absolutely requisite for the successful control of our prison. Then, too, the watchrooms where they are compelled to sleep are located within the prison gates and adjoining the prison proper, where it is next to impossible to get more than three or four hours sleep when off watch, on account of the noise. Furthermore, they are sepa-

rated from the armory by the prison gates, and, in an inside "break," the guards would be as far away from their arms as the prisoners themselves; all of which, to my mind, is radically wrong. I would, therefore, respectfully recommend that our guard force be enlarged, that the compensation be raised from \$50 to at least \$60 per month, with board and lodging, and that a suitable building, or dormitory, be erected away from the prison proper and without the gates, but in close proximity to the armory, where the "watches" when off duty could find quiet and the opportunity for the sleep so much needed to fit them for the proper performance of their duties. Should your Honorable Board consider my recommendations favorably, it will necessitate an annual appropriation by the Legislature of approximately \$72,500, and such further sum as would be required to erect a suitable guard building, approximately \$2,000.

There has been one escape during my administration: Convict No. 5403, Charles Murray, who passed the guard posts on the canal on the 17th day of May, 1904, by dressing in citizen's suit and imitating an employé of the Folsom Power Company, whose men pass along the line of railroad within the prison grounds in attending the headgates at the dam. He was captured later in San Francisco and returned to the prison on the 12th of July, 1904.

When I assumed office I found the smuggling of opium and other narcotics to be quite extensive and prevalent. I at once proceeded to institute radical measures to stop this business. Impartial and rigid investigation caused me to come to the conclusion that there was collusion between some of the attachés of the prison and the convicts in this illicit traffic. I summarily dismissed the suspected officials. Night and day we search for the narcotics, and watch all suspected avenues with the utmost vigilance to prevent the smuggling of the drug that is so ruinous to the health and so subversive of all discipline or control. A prisoner under its influence can be induced to storm a gatling battery, or a thousand guns, without thought or care of danger, or the consequences to follow. Within the past six months we have captured about twenty-seven pounds of opium and two or three pounds of morphine. At present there is comparatively little of these narcotics in the prison.

The health of the prisoners has been remarkably good during the past year, as an examination of the Physician's report will demonstrate.

Upon my taking charge many complaints were made to me by the prisoners that they did not get enough food to eat, and that the food was not cooked or palatable. Upon investigation it appeared to me that the complaints were not unreasonable nor without some foundation. A change was made in the dietary; more meat and other nourishing foods were issued to the prison mess. An experienced steward

was appointed, with instructions to give his personal and undivided attention to the several messes of the prison, and to see that the food was cooked and served in a proper manner. Since these changes were made there is a marked improvement in the discipline of the prison and the general conduct of the prisoners. Although the increased issues have added largely to our maintenance expenses, I am of the opinion the money has been well spent. No reasonable complaints come to me now regarding the quantity or quality of the food served to the prisoners.

Experience has taught me that prisoners work better and are more contented and tractable, and take greater interest, when there is some little reward held out to them for faithful, painstaking service it matters not how small or trifling the inducement may be. It has occurred to me that it would greatly improve the discipline of the prison if your Honorable Board would, by sanction of the Legislature, fix a daily or weekly stipend for faithful work, to be deposited with the Clerk and stored up for their use when leaving the prison, the same to be subject to forfeiture by the prisoner for failure to work or violation of prison rules. This method of encouragement has been adopted in some of our best conducted prisons, and is highly recommended. The stipend may be ever so small so long as each day's good service and conduct adds to the account. Many prisoners would strive to lay up this account to help them over the obstacles met with on leaving the prison and starting life anew.

One particular matter, since my connection with Folsom Prison, has especially and most deeply impressed me, above everything else, and that is *the absolute and utter impossibility* of reformation under the congregate system of imprisonment. Reading the last biennial report of your Honorable Board, and the reply thereto by His Excellency the Governor, at the time upon this subject, I had hoped the last Legislature in its wisdom might find some measures, or take some steps, whereby this condition of affairs might be changed. Indeed, it almost seems a crime in itself, for a judge to sentence a young offender to State Prison under the present method of herding prisoners promiscuously together. Nothing delights a confirmed criminal more than to make a hardened offender out of a youth of tender conscience. We all know our system is wrong—radically wrong. There should be no commingling of vicious and depraved perverts—the seasoned and confirmed recidivists—with those who can be influenced by good surroundings and teachings, and brought back into the paths of probity and rectitude. Why should the people of the State of California doom a first offender to a life of crime by forcing him to associate with moral degenerates? We, who are so boastful of our wonderful achievements in art, literature, and learning; of our grand financial and social successes; of our

astounding and wonderfully varied resources, and the exalted position we have attained in the sisterhood of States, exhibiting with pride our great State institutions, must draw the curtain upon our State Prisons. We feel ourselves compelled to turn away from this glaring blot upon our social fabric. The congregate system practiced in California is, to the first offender, fraught with contamination, corruption, and crime—perversion, degeneracy, and ruin. It is a stench in the nostrils of humanity, and an everlasting stain upon a Christian people. What a farce are these "Prisoners' Aid Societies" who sleep until a young man has graduated from our "schools of crime" before they awaken to a realization that he needs a prop to hold him up and to keep him from falling back into sin. There is a certain plastic time in a young offender's career when he can be molded by good influences and encouraging words of advice into strong, vigorous, moral manhood; but it is not after his intimate and constant association with crafty and hardened criminals for a term of years. It is my humble opinion that the two "institutions for criminal education" in California (and they are truly admitted to be nothing more), located at San Quentin and Folsom, and supported by the taxpayers of the State, should both be done away with in the fair and honorable name of civilized Christianity—a new prison, or prisons, erected and built according to the most advanced ideas of Christian penologists, so that men may be rescued from lives of crime, and not be forced into everlasting destruction by a crying deficiency in our system of reformatories. This subject has impressed itself upon my attention so strongly that I have earnestly studied how it can be accomplished without enormous expense to the State. So many plans and theories are advanced, and so much has been written and said upon the subject, that I feel it is not out of place for me to suggest a remedy to your Honorable Board.

I have a plan which I now offer to your Honorable Board for consideration. It is not original with me, but commends itself more strongly than any other suggested. I will preface the matter by the statement that I suppose it is not a question of dispute that both the State Prisons are not what they should be, either in the system of reformation in vogue, or in their cellular construction. The buildings at San Quentin Prison are old and more or less crumbling with age; the sanitary conditions are not the best, I am told; the cells poorly constructed and almost unfit for use. The location, so near to San Francisco, is a constant source of trouble in ways too numerous to cite. Folsom Prison has no walls to encircle it; is poorly located for enlargement—such an enlargement and surrounding wall necessitating a large outlay of the State's money. Both prisons will need large appropriations to put them in proper condition for accommodating prisoners, even under the congregate system. I suggest that the State sell both prisons. San Quentin is

located on a beautiful bay with gentle slopes, that could be sold for villa sites at high figures. The water power and granite quarries at Folsom Prison are very valuable. A 900-horsepower waterfall, situated like the power at Folsom Prison, must be valued highly. The property at Folsom is wonderfully situated and adapted for manufacturing purposes, and should command satisfactory selling figures.

Then the next question asked is: Where would I locate the prison, or prisons? Adopt the suggestion heretofore made by some one, and place it, or them, on one of the many islands that lie contiguous to the coast of our State. From the many, select one that may be bought for a reasonable amount by the State, well watered and wooded, containing good building-stone and farming land, and yet within the limits of California. There are several with an area of from 10,000 to 20,000 acres, and approximately not over twenty miles from the main land, with all of these requisites. The present prison holdings could undoubtedly be sold so as to realize enough money to purchase some one of these islands, transfer all the prisoners, machinery and prison paraphernalia, and erect a modern prison, or system of prisons and reformatories, without any ultimate expense to the State. A large annual saving in maintenance would result were such a course adopted. On an island the administrative officers could be reduced fully one half, while the guard force could be reduced to less than one half of what it takes now for the two prisons. As water transportation is cheaper than by rail, supplies would cost less. Merchants in Los Angeles, and other cities along the coast, could bid for furnishing the prison with supplies, so that competition would cheapen purchases. Coal, wood, jute, and such supplies could be furnished in vessels in bulk, with no wharfage, dockage, or rehandling expenses. Oil for fuel could be shipped in bulk direct from the oil wells that line the edge of the ocean, at a nominal expense, thereby reducing to a wonderful extent the cost of running mills and machinery. I think it may be safely estimated that the State could save annually in the neighborhood of \$150,000 in the maintenance of its penal institutions, were the same located on an island such as any of us might recall.

The danger of escapes would be reduced to a minimum; with ordinary precautions and vigilance, no "breaks" could occur, such as happened at Folsom Prison last July a year ago, and at San Quentin a number of years ago. The smuggling of opium and other narcotics, together with their destructive uses, would be entirely stopped—and this, to my mind, is the bane of California prisons. The climate is of the best; the drainage can be made perfect, and there is no reason why the health of the inmates should not be most excellent. The same industries could be carried on there that are now occupying the prisoners. Almost all the present machinery could be removed and utilized. With, say,

12,000 acres of land in one body, a sufficient space is obtained to separate the prisoners according to the modern ideas of the best penologists. A model system of prisons and reformatories could be constructed that would attract the admiration of the civilized world and redound to the honor of our great State. Many other cogent and weighty reasons could be advanced why it would be better in almost every respect to close our present prisons and establish them on one of the islands adjacent to our coast, in preference to any site on the mainland, or two or three branch prisons on the mainland. Of course some one will acclaim loudly against "penal colonization," etc.; but these islands are so close to our shores, being portions really of the counties of the State, paying taxes therein and subject to their ordinances and regulations, that it is stripped of this phase of "foreign banishments" so objectionable to the American mind. Steamers pass and repass daily, and the cost of transportation to and from prison would be no greater than now. It seems to me that the *good* accomplished by this move is a potential argument in its favor. We are establishing the prisons and reformatories not for to-day, but for to-day, and to-morrow, and for generations to come; therefore, it is the part of wisdom to lay our foundations strong and well, that time may add to their perfection and intelligence illumine our efforts in behalf of these unfortunate, misguided charges of society.

The last session of the Legislature appropriated the sum of \$25,000 for the erection of a building at Folsom Prison for the criminal insane. Owing to an oversight no provision was made exempting its construction from the "Act to regulate the erection of public buildings and structures," passed by the Legislature of 1871-72 and 1875-76. It was evidently the intention of the Legislature that this building should be constructed by convict labor out of Folsom Prison granite; for otherwise the amount appropriated would be utterly inadequate to erect the building. It would be out of the question to construct it under any other conditions. Under no circumstances could contractors be permitted to come inside the boundaries of Folsom Prison with a number of workmen to mix and mingle with the prisoners, or have free access at will to the grounds, even if the other provisions of the building-law could be followed. The consequences to prison discipline would be disastrous. Being notified by the State Board of Examiners, and the State Controller, that the provisions of this law must be observed, your Honorable Board thought it for the best interests of the State and of the prison to cease all constructive operations until the Legislature could amend the Act and exempt it from the provisions of these statutes. It will be necessary to draft an Act for submission to the Legislature covering this objection before we can proceed with the building of the hospital for the criminal insane.

Permit me to call the attention of your Honorable Board to the fact

that the rock at the rock-crushing plant of the prison is fast becoming exhausted, the character of the rock changing, the ledge dipping and running into granite, while the mountains of dirt and decomposed granite on top of the ledge make it very expensive to uncover, and, in my opinion, it will not last more than two or three years at most. It will, therefore, become necessary to find other employment for the prisoners, one third of whom are now employed in that industry. At a former meeting of your Honorable Board I was instructed to investigate and, if possible, find from the many, some profitable employment which would not come in competition with free labor. I confess I have found it a difficult problem. I beg to suggest, however, that a small number might be employed in knitting socks and stockings for prison use, and for furnishing other State institutions with this necessary article. A limited market might be even found for their sale. I learn that the State Prison of Utah has several of these machines in operation and finds ready sale for all they produce through the Middle and Western States and Territories. We might also manufacture hats for use in the various institutions of the State, and not come in contact to any appreciable extent with free labor in this State. The industry, however, that strikes me as being the least objectionable to free labor is the manufacture of toys. The major part, if not all, of the toys sold in the United States, are made in and imported from Germany. Here there is a large field into which prison-made toys might find a market and in no way interfere with free labor in California. This work, too, seems to be congenial to the average convict, for he is given to the manufacture of trinkets of all kinds as a matter of pleasure. Of course, before establishing such a factory, it would be necessary that a competent man be employed to look after its details, and a representative sent from our State to Germany for the purpose of looking over the various institutions in that country, and learning the various woods, paints, and materials used by them in those factories, as well as the methods used in their making. With a field covering the whole United States, it would seem that this industry might be the means of saving the hundreds of prisoners in our prisons from idleness, and at the same time return to the treasury thousands of dollars annually. It is only by the manufacture of *something* that our prisons can be made to save the taxpayers of the State from the burden of their care and support. I note by their report, that the State Prison of Tennessee, last year, in addition to paying for maintenance and support, paid into the State Treasury, approximately, the enormous sum of \$125,000. With this showing it does seem that we should be able to find some avenue of employment through which we might relieve the tax-burdened people of our State, and at the same time take no bread from the mouth of free labor. I firmly believe, with proper preparation for installing

plants in our prisons for the manufacture of these salable goods, much would be saved in the cost of maintaining our prisons, and at the same time we would solve the problem of employment for the prisoners. Being so convinced myself, I commend them to your serious consideration.

I sincerely thank the members of the Board for their uniform courtesy, and the promptness with which they have responded to any suggestions that would inure to the best interests of the prison. To the officers and guards I am also indebted for their earnest, efficient, and loyal coöperation in carrying out the policy of your Honorable Board.

ARCHIBALD YELL,
Warden State Prison at Folsom.

CLERK'S REPORT.

STATE PRISON AT FOLSOM, July 1, 1904.

To the Honorable the State Board of Prison Directors:

GENTLEMEN: I herewith submit for your consideration a full statement of the financial transactions of this prison for the fifty-fourth and fifty-fifth fiscal years, ending June 30, 1903, and June 30, 1904.

Very respectfully,

BRAINARD F. SMITH,

Clerk.

TABLE No. 1 A.
Cash Receipts during Fifty-fourth Fiscal Year, ending June 30, 1903.

CASH RECEIPTS—FIFTY-FOURTH FISCAL YEAR.

	July.	August.	September.	October.	November.	December.
Cash balance from 53d fiscal year.	\$1,003 67					
General appropriation, 53d fiscal year—Support	5,363 30	\$6,031 90				\$5,101 44
General appropriation, 53d fiscal year—Salaries	3,955 00					3,922 50
General appropriation, 54th fiscal year—Support		3,899 52	\$9,182 74	\$3,898 32	\$5,538 69	836 10
General appropriation, 54th fiscal year—Salaries		286 37	3,887 59	1,295 09	3,839 26	
State Treasury—Prison Fund	105 00				184 00	
United States (Government)	182 00				123 00	124 67
Rentals	124 85	128 94	132 00	178 00	48 00	234 00
Switching cars	28 00	202 00	172 00	1 19	5 04	1 25
Sales—Leather	2 29	2 14	31	78 39	4 80	99 32
Meat	86 23	83 98	92 92	1 20	20 00	10 93
Coal	3 00	1 80	3 00	20 00	34 00	34 00
Wood	19 50	17 00	14 00	4 94		5 02
Coal oil	6 68	3 48	2 93		21 63	6 85
Ice	5 70	8 89	3 84		10 21	3 96
Vegetables	17 02	19 64	13 77	11 13	8 25	6 75
Shoe mendings	10 00	10 50	12 00	7 25	2 47	
Groceries	21 99	13 83	52	2 65		
Clothes						4 65
Hardware	8 24	2 72	20 53	81	3 63	4 29
Dry goods	95	15 58	2 50	65 00	11 16	11 33
Milk and cream	2 24	52	45		15	3 85
Forage	49 25	44 50	54 00	41 75	56 00	65 00
Meals	1 25	1 00	6 58	2 50	75	50
Shop work	21 70	13 42	3 31	1 45	9 34	17 18
Junk	96 84		78 80			
Washing	42 25	54 94	49 22	52 00	41 32	36 42
Livestock					40 00	
Pasturage	16 75	17 00	20 45	13 25		13 10
Drugs	8 34	14 94	10 78	10 74	6 65	8 01
Ammunition	1 20		1 80	3 60	1 80	
Granite	13 00	54 50	110 55	41 50	23 00	242 00
Sundries to rock-crusher	67 95	50 07	98 13		158 95	78 37
Rebates—Telephone	95	80	70	1 55	1 10	1 30
Transportation of discharged prisoners						
Freight and cartage		2 40	9 45			
Printing biennial report			51			
Totals	\$11,465 14	\$10,982 38	\$15,280 47	\$4,560 22	\$11,274 27	\$10,873 15

TABLE No. 1 A—Continued.

CASH RECEIPTS—FIFTY-FOURTH FISCAL YEAR.	1903.					Total 1902-1903.
	January.	February.	March.	April.	May.	June.
Cash balance from 53d fiscal year.						\$1,003 67
General appropriation, 53d fiscal year—Support.						11,595 20
General appropriation, 53d fiscal year—Salaries.						3,955 00
General appropriation, 54th fiscal year—Support.	\$4,795 00	\$5,133 09	\$5,248 57	\$4,792 27	\$4,954 17	\$10,238 64
General appropriation, 54th fiscal year—Salaries.	4,028 55	4,050 33	3,925 16	3,851 61	4,082 50	4,155 80
State Treasury—Prison Fund.	433 73	1,366 79	2,671 11	3,150 85	1,567 78	1,293 26
United States Government.		193 50			178 00	737 50
Rentals.	131 23	132 43	132 07	126 00	126 00	1,532 61
Switching cars.	253 00	68 00	63 00	272 00	181 00	1,875 00
Sales—Leather.	1 53		9 90	1 98	9 72	39 81
Meat.	110 41	107 01	89 93	92 07	89 82	99 57
Coal.	32 03	24 85	13 88	6 73	9 00	5 40
Wood.	36 00	60 00	44 00	44 00	8 00	2 00
Coal oil.	8 50	8 36	5 45	10 10	3 35	318 50
Ice.				20		68 68
Vegetables.	6 67	10 65	5 92	74	4 46	5 52
Shoe mendings.	15 00	10 15	9 50	10 00	4 75	7 40
Groceries.	39	3 80	27	51	27	12 00
Clothes.	7 40	4 33				2 86
Hardware.	3 93	15 67	3 40	4 34	16 27	3 37
Dry goods.	32 75	8 35	6 49	6 57	4 55	10 88
Milk and cream.	35	30	45	90	4 45	8 60
Forage.	49 00	50 00	46 00	48 00	33 25	16 11
Meals.	1 25	5 00	3 25		3 25	2 45
Shop work.	41 86	13 45	8 88	31 86	12 18	32 00
Junk.		212 90	207 80	78 15		568 75
Washing.	44 54	34 48	30 54	37 58	30 34	26 58
Livestock.						188 00
Pasture.	21 00	21 00	18 25	17 35	13 50	888 66
Drugs.	16 83	13 77	25 80	13 34	13 90	494 57
Ammunition.	4 20	4 20	60	5 40	3 60	40 00
Granite.	34 50	64 50	53 66	62 00	30 00	200 22
Supplies to rock-crusher.	49 32	57 82	84 43			159 07
Rebates—Telephone.	1 40	60	2 45		60	31 20
Transportation of discharged prisoners.			13 80		80	81 00
Freight and cartage.			58 18			645 04
Printing biennial report.						15 15
Totals.	\$10,160 39	\$11,675 33	\$12,708 61	\$12,738 98	\$11,747 21	\$16,597 61
					362 50	362 50
						\$140,063 76

TABLE No. 1 B.
Cash Receipts during Fifty-fifth Fiscal Year, ending June 30, 1904.

CASH RECEIPTS—FIFTY-FIFTH FISCAL YEAR.

	July.	August.	September.	October.	November.	December.
Cash balance from 54th fiscal year	\$909 91					
General appropriation, 54th fiscal year—Support	5,015 17					
General appropriation, 54th fiscal year—Salaries	3,954 15					
General appropriation, 55th fiscal year—Support		\$5,238 52	\$5,594 57	\$4,492 43	\$5,559 21	\$4,306 27
General appropriation, 55th fiscal year—Salaries		4,143 37	4,510 33	4,349 31	4,451 93	4,397 51
State Treasury—Prison Fund	2,367 76	961 72		3,433 78	667 19	
Sewerage plant appropriation		371 46				
United States Government		227 50			230 00	
Rentals	129 67	136 61	135 00	134 50	138 60	138 00
Switching cars	164 00	195 00	125 00	163 00	151 00	122 00
Sales—Leather	3 39	4 68	4 05	74	45	56
Meat	91 52	85 42	92 12	91 60	105 49	105 82
Coal	6 00	6 60	9 00	4 20	6 00	15 00
Wood					3 00	3 00
Coal oil	1 60	3 81	2 40	3 40	9 47	8 36
Ice	10 63	9 00	9 34	17 85	12 56	2 52
Vegetables	11 83	9 64	13 36	18 44	9 21	11 57
Shoe mendings	4 00	6 25	9 25	7 75	15 25	9 50
Groceries	54	1 13	40	64	1 24	1 56
Clothes			35 12			
Hardware	5 95	1 51	4 39	7 03	3 49	4 27
Dry goods	33			10 35	2 06	10 19
Milk and eggs		1 55		3 02	25	2 60
Forage	37 75	33 75	51 00	68 00	74 00	73 75
Meats	3 20	2 00	15 60	4 35	5 70	1 30
Shop work	12 06	5 81	14 19	2 24	4 53	6 57
Junk				150 20		
Washing	50 62	36 72	51 22	41 68	36 54	45 96
Pasturage	16 65	16 50	16 40	15 35	12 15	8 00
Drugs	12 29	11 41	4 43	14 15	11 15	10 10
Ammunition	6 00	6 60	1 20	10 05	1 05	3 15
Granite	98 00	193 00	17 50	120 33	129 00	123 50
Sundries to rock-crusher			43 35	167 92		
Lime	05		55			
Paints and oils				74	10	
Rebates—Telephones	35	65	1 15	85	65	1 70
Transportation of discharged prisoners	5 20		5 60	3 20		
Freight and cartage						
Transferring convicts to San Quentin						
Salaries						
Totals	\$12,920 12	\$11,710 73	\$10,768 07	\$13,337 10	\$11,641 27	\$9,412 76

TABLE No. 1 B--Continued.

1904.

CASH RECEIPTS--FIFTY-FIFTH FISCAL YEAR.

	January.	February.	March.	April.	May.	June.	Total, 1903-1904.
Cash balance from 54th fiscal year.....							\$909 91
General appropriation, 54th fiscal year--Support.							5,015 17
General appropriation, 54th fiscal year--Salaries							3,954 15
General appropriation, 55th fiscal year--Support.	\$6,344 67		\$11,315 80		\$11,312 42		54,163 89
General appropriation, 55th fiscal year--Salaries.	4,331 75	\$4,233 86	4,239 34	\$4,257 57	4,140 00	\$4,146 29	47,201 26
State Treasury--Prison Fund.....	1,359 51	459 41	25 00	1,779 20	5,159 23	110 69	16,323 49
Sewerage plant appropriation.....							371 46
United States Government.....		230 00			307 50		995 00
Rentals.....	137 68	125 80	138 00	138 00	133 10	131 39	1,616 35
Switching cars.....	130 00	156 00	193 00	179 00	285 00	265 00	2,128 00
Sales--Leather.....	93	1 55	3 39	3 92	3 26	1 64	28 56
Meat.....	109 30	110 67	110 68	110 52	103 85	106 82	1,223 81
Coal.....	26 50	17 00	26 00	22 50	5 72	11 75	153 27
Wood.....			1 00				7 00
Coal oil.....	11 25	10 00	14 00	7 00	20 50	8 68	100 47
Ice.....							61 90
Vegetables.....	10 06	8 32	7 54	4 42		5 27	109 66
Shoe mendings.....	12 40	7 85	9 25	9 50	15 25	10 05	116 30
Groceries.....	1 12	2 48	3 26	22	1 04	3 93	17 56
Clothes.....							35 12
Hardware.....	2 47	3 46	2 71	45	21	5 82	41 76
Dry goods.....	7 39	1 02	2 00	15	05		34 06
Milk and eggs.....	3 22	2 74	1 58	34			18 35
Forage.....	80 00	70 50	68 00	62 50	32 00	26 75	678 00
Meals.....	4 00	1 45	1 55	25	50	75	40 55
Shop work.....	6 40	2 83	8 78	6 55	85	3 85	74 66
Junk.....							150 20
Washing.....	30 96	27 17	33 48	27 98	28 70	41 46	452 49
Pasturage.....	8 00	8 50	7 25	4 25	5 00	4 75	122 80
Drugs.....	15 70	19 37	14 35	12 05	10 95	10 37	146 32
Ammunition.....	11 28	11 10	2 80	2 85	4 90	6 45	67 43
Granite.....	80 00	126 50	276 65	152 00	215 00	3 50	1,534 98
Sundries to rock-crusher.....	83 84		67 45	53 25	69 76		485 57
Lime.....			18				78
Paints and oils.....	20						1 04
Rebates--Telephones.....	4 30	1 70	55	2 05	25	1 95	16 15
Transportation of discharged prisoners	5 00		70			3 60	23 30
Freight and cartage.....	6 86		76				7 62
Transferring convicts to San Quentin.				6 80			6 80
Salaries.....				80			80
Totals.....	\$12,824 79	\$5,639 28	\$16,575 05	\$6,844 12	\$21,855 04	\$4,910 76	\$138,439 09

TABLE No. 2 A.

Cash Disbursements during Fifty-fourth Fiscal Year, ending June 30, 1903.

1902.

CASH DISBURSEMENTS—FIFTY-FOURTH FISCAL YEAR.

	July.	August.	September.	October.	November.	December.
Merchandise and supplies, 53d fiscal year.....	\$4,769 16	\$6,039 36	\$9,180 45	-----	\$5,236 26	\$5,047 25
Merchandise and supplies, 54th fiscal year.....	3,955 00	-----	-----	-----	-----	-----
Salaries, 53d fiscal year.....	-----	3,899 52	3,887 59	\$3,898 32	3,829 28	3,922 50
Salaries, 54th fiscal year.....	-----	688 42	718 89	813 62	531 10	683 97
State Treasury—Prison Fund.....	874 52	-----	-----	-----	-----	-----
State Prison Directors.....	-----	-----	-----	-----	-----	-----
State Printer.....	-----	149 75	48 90	78 75	130 89	197 00
Discharged prisoners.....	129 15	12 25	19 30	-----	33 35	14 15
Telephones.....	13 40	4 13	-----	-----	28 92	-----
Telegraph.....	-----	20 35	18 05	-----	33 25	13 60
Expressage.....	29 35	21 23	64 50	-----	44 80	16 85
Traveling expenses.....	2 10	-----	74 00	-----	-----	36 55
Advertising.....	-----	-----	160 00	-----	80 00	80 00
Religious services.....	80 00	80 00	82 50	-----	60 00	50 00
Postage.....	65 00	20 00	-----	-----	100 00	-----
Rental, ranch.....	-----	-----	184 20	-----	163 40	143 70
Freights.....	126 47	41 07	8 70	-----	-----	-----
Transportation of insane prisoners.....	11 10	79 88	-----	-----	149 74	322 94
Wood and charcoal.....	17 50	-----	181 28	-----	63 80	-----
Coal and coke.....	239 97	-----	98 80	-----	404 50	212 50
Experting books.....	-----	-----	403 55	-----	82 50	-----
Allowance in lieu of board and lodging.....	175 65	-----	-----	-----	-----	-----
Macadam.....	33 60	-----	-----	-----	-----	-----
Medical services, extra.....	105 00	-----	19 48	-----	-----	-----
Refund—overpayment on granite.....	-----	-----	2 50	-----	2 50	-----
Postoffice box rent, Folsom.....	-----	-----	-----	-----	56 00	-----
Expense returning escaped prisoners.....	-----	-----	-----	-----	25 00	-----
Executions.....	-----	-----	-----	-----	-----	-----
Repairs on typewriter.....	-----	-----	-----	-----	-----	-----
Team hire.....	-----	-----	-----	-----	-----	-----
Totals.....	\$10,626 97	\$11,055 96	\$15,152 69	\$4,790 69	\$11,055 20	\$10,741 01

TABLE No. 2 A—Continued.

CASH DISBURSEMENTS—FIFTY-FOURTH FISCAL YEAR.	1903.					Total. 1902-1903.
	January.	February.	March.	April.	May.	June.
Merchandise and supplies, 53d fiscal year.	\$4,290 29	\$5,705 05	\$6,495 75	\$6,558 02	\$5,454 27	\$9,680 65
Merchandise and supplies, 54th fiscal year.						
Salaries, 53d fiscal year.	4,028 55	4,050 33	3,925 16	3,851 61	4,082 50	4,155 80
Salaries, 54th fiscal year.	864 76	750 66	947 32	745 22	881 05	1,002 46
State Treasury—Prison Fund.						378 10
State Prison Directors.						725 00
State Printer.						
Discharged prisoners.	157 75	143 05	177 80	725 00	63 20	136 80
Telephones.	12 75	16 60	8 65	118 55	16 65	20 85
Telegraph.		15 98	5 50	3 00	4 99	
Expressage.	18 80	17 65	14 70	16 90	21 65	28 75
Traveling expenses.	67 35	43 40	84 15		16 95	22 65
Advertising.						
Religious services.	80 00	80 00	80 00	80 00	80 00	160 00
Postage.	1 00	50 00	5 00	72 00	10 00	165 00
Rental, ranch.						
Freights.	187 10	111 50	397 47	94 47	52 80	159 57
Transportation of insane prisoners.		20 00			6 25	20 05
Wood and charcoal.	29 00		26 00		361 94	381 37
Coal and coke.	289 19	4 54	377 03		59 80	15 30
Experting books.			62 80			
Allowance in lieu of board and lodging.	225 00	280 16	258 38	238 93	225 00	461 61
Macadam.	18 75	52 50	45 00	60 00	30 00	15 00
Medical services, extra.						
Refund—overpayment on granite.					3 50	22 98
Postoffice box rent, Folsom.		2 50			2 50	10 00
Expense returning escaped prisoners.			59 25	59 75	179 15	358 15
Executions.						25 00
Repairs on typewriter.						18 50
Team hire.	9 50					9 00
				16 00		10 00
Totals.	\$10,279 79	\$11,443 92	\$12,969 96	\$12,658 50	\$11,552 20	\$16,826 96
Cash on hand June 30, 1903.						\$139,153 85
						909 91
						\$140,063 76

TABLE No. 2 B.
Cash Disbursements during Fifty-fifth Fiscal Year, ending June 30, 1904.

CASH DISBURSEMENTS—FIFTY-FIFTH FISCAL YEAR.	1903.					
	July.	August.	September.	October.	November.	December.
Merchandise and supplies, 54th fiscal year		\$6,258 40	\$4,568 46	\$9,810 89		\$4,718 98
Merchandise and supplies, 55th fiscal year						
Salaries, 54th fiscal year	\$3,954 15	4,143 37	4,555 33	4,349 31	4,451 93	4,423 18
Salaries, 55th fiscal year		385 73	844 76	524 27	862 33	749 19
State Treasury—Prison Fund	765 86					
State Prison Directors	144 05	287 40	150 90	191 15	147 00	219 45
Discharged prisoners		8 95	58 93	122 95		17 77
Telephone		4 57	9 69	47 40		3 10
Telegraph		20 75	22 00	43 60		14 65
Expressage			48 90	60 20		26 45
Traveling expenses						
Advertising		89 95				
Religious services		80 00	80 00	160 00		80 00
Postage		50 00	52 00			50 00
Rentals, ranch		100 00				
Freights		36 01	215 83	155 23		87 36
Transportation of insane prisoners.						
Wood and charcoal		75 84	395 65	521 34		432 00
Coke and coal		15 30	59 33	400 96		320 87
Experting books		59 80				114 80
Allowance in lieu of board and lodging		240 00	255 00	532 86		262 25
Macadam						
Postoffice box rent			2 50	2 50		
Executions						
Sewerage plant			371 46			
Escaped prisoners			406 95	458 40		72 50
Expenses returning escaped prisoners.				104 45		
Rewards paid for capture of escaped prisoners	343 36			1,100 00		
Trials, escaped prisoners						
Electric light rentals.						
Insurance.						
Totals	\$5,207 42	\$11,856 07	\$12,077 69	\$18,585 51	\$5,461 26	\$11,592 55

TABLE No. 2 B--Continued.

1904.

CASH DISBURSEMENTS-- FIFTY-FIFTH FISCAL YEAR.

Total,
1903-1904.

	January.	February.	March.	April.	May.	June.	
Merchandise and supplies, 54th fiscal year.....	\$9,841 30		\$5,589 54	\$4,537 69	\$10,274 04	\$7 25	\$8,258 40
Merchandise and supplies, 55th fiscal year.....							49,348 15
Salaries, 54th fiscal year.....	4,331 75	\$4,233 86	4,239 34	4,257 57	4,140 00	4,146 29	3,954 15
Salaries, 55th fiscal year.....	659 68	673 96	834 81	757 21	571 85	1,085 64	47,251 93
State Treasury--Prison Fund.....				259 45			8,715 29
State Prison Directors.....							259 45
Discharged prisoners.....	43 60	114 90	112 20	251 20	221 00	157 75	2,040 60
Telephone.....	38 65		39 65	16 40	19 70	16 80	339 80
Telegraph.....	6 47		2 42		18 99	5 29	97 93
Expressage.....	43 60		11 90	11 75	18 85	16 40	203 50
Traveling expenses.....	66 15			6 85	16 50	4 70	229 75
Advertising.....							89 95
Religious services.....							880 00
Postage.....	160 00		80 00	80 00	160 00		332 00
Rental, ranch.....	50 00			25 00	50 00	55 00	200 00
Freights.....	169 97						984 40
Transportation of insane prisoners.....			125 03	72 35	122 62		23 90
Wood and charcoal.....	505 01		79 33	12 35	11 55		2,335 17
Coke and coal.....	286 25		379 86	87 00	239 00		3,390 87
Experting books.....			64 80	445 00	1,483 30		304 20
Allowance in lieu of board and lodging.....	510 00		235 64	240 00	455 80		2,731 55
Macadam.....				2 40	9 00	5 25	16 65
Postoffice box rent.....	2 50				2 50		10 00
Executions.....			25 00				25 00
Sewerage plant.....							371 46
Escaped prisoners.....	130 55				206 75		1,275 15
Expenses returning escaped prisoners.....					136 20		584 01
Rewards paid for capture of escaped prisoners.....				1,100 00	550 00		2,750 00
Trials, escaped prisoners.....					2,632 05		2,632 05
Electric light rentals.....	100 00						100 00
Insurance.....				50 00			50 00
Totals.....	\$17,045 48	\$5,022 72	\$11,819 52	\$12,212 22	\$21,404 50	\$5,500 37	\$137,785 31

Cash on hand June 30, 1904.....

653 78

\$138,439 09

TABLE No. 3.

Statement of Maintenance and Salary Expenditures from July 1, 1889, to July 1, 1904—Tabulated from Cash Expenditures.

Warden.	Fiscal Years.	Average Population.	Total Maintenance.	Per Capita Maintenance.	Salaries.	Per Capita Salaries.	Total Per Capita Per Annum.
Charles Aull	1889-1890	623.00	\$75,491 84	\$121 17	\$40,577 94	\$65 13	\$186 30
Charles Aull	1890-1891	678.66	76,049 94	112 05	42,701 64	62 92	174 97
Charles Aull	1891-1892	695.08	76,557 91	110 14	42,501 92	61 15	171 29
Charles Aull	1892-1893	709.08	85,549 37	120 65	45,831 90	64 63	185 28
Charles Aull	1893-1894	689.53	65,989 06	95 70	47,531 00	68 93	164 63
Charles Aull	1894-1895	791.63	74,440 67	94 03	47,523 60	60 03	154 06
Charles Aull	1895-1896	890.42	71,467 68	80 26	48,899 75	54 92	135 18
Charles Aull	1896-1897	900.63	70,119 39	77 86	49,718 44	55 20	133 06
Charles Aull	1897-1898	907.70	72,812 73	80 22	50,661 17	55 81	136 03
Charles Aull	1898-1899	890.42	76,253 04	85 64	50,035 15	56 19	141 83
Charles Aull	To Dec. 1, 1899	848.24	32,383 42	38 18	19,739 17	23 28	\$61 46
Thomas Wilkinson	Dec. 1, 1899						
Thomas Wilkinson	To July 1, 1900	840.28	46,499 95	48 20	27,628 40	32 87	81 07
Thomas Wilkinson	1900-1901	769.53	69,700 64	90 64	47,607 04	61 86	152 42
Thomas Wilkinson	1901-1902	765.75	64,136 70	83 75	47,475 78	62 00	145 75
Thomas Wilkinson	1902-1903	783.19	77,252 56	98 64	47,485 31	60 63	159 27
Thomas Wilkinson	To Dec 1, 1903	781.58	31,874 78	40 79	21,852 45	28 08	68 87
Archibald Yell	Dec. 1, 1903						
Archibald Yell	To July 1, 1904	839.46	51,437 22	61 27	29,407 96	35 03	96 30

Maintenance and salaries of rock-crusher are not included in the above statement.

TABLE No. 4 A.

Per Capita Maintenance from July 1, 1902, to July 1, 1903.

	Inventory July 1, 1902.	Issues 1902-1903.	Total.	Inventory July 1, 1903.	Balance Gross Cost.	Gross per Capita per Diem.
Warden's Mess	\$57 61	\$650 53	\$708 14	\$26 97	\$681 17	\$0 00.238+
Officers and Guards' Mess	1,829 32	5,908 45	7,737 77	1,887 04	5,850 73	02.047—
Prisoners' Mess	4,108 36	26,620 32	30,728 68	4,410 40	26,318 28	09.2 +
Hospital	2,664 85	740 13	3,404 98	2,548 75	856 23	00.3 —
Commissary	785 67	248 77	1,034 44	773 05	261 39	00.091+
General Overseer	4,738 64	1,048 58	5,787 22	5,300 85	486 37	00.18 —
Captain of Guard	11,852 38	497 00	12,349 38	11,417 16	932 22	00 326+
Turnkey	20,027 31	11,622 64	31,649 95	21,276 91	10,373 04	03.63 —
Engineer	7,708 26	3,072 12	10,780 38	9,540 93	1,239 45	00.44 —
Laundry	682 56	376 27	1,058 83	660 01	398 82	00.14 —
Stock	5,525 23	1,752 84	7,278 07	6,319 84	958 23	00.335+
Warden's Office	956 84	66 14	1,022 98	956 59	66 39	00.023+
Clerk's Office	1,132 82	177 59	1,310 41	1,140 70	169 71	00.059+
Prison Directors		418 95	418 95		418 95	00.146+
Quarry	7,944 38	35 56	7,979 94	7,774 28	205 66	00.071+
Light Department	12,309 05	1,703 01	14,012 06	12,008 18	2,003 88	00.7 —
Farm Department	4,547 39	587 81	5,135 20	4,781 24	353 96	00.123+
Expense		2,285 93	2,285 93		2,285 93	00.8 —
Repairs		1,287 99	1,287 99		1,287 99	00.45
Furniture and Fix- tures (W. H.)	5,802 13	150 72	5,952 85	5,792 33	160 52	00.056+
Ice plant	3,711 98	1,185 83	4,897 81	3,728 18	1,169 63	00.409—
Officers' and Guards' Laundry	72 08	107 11	179 19	116 90	62 29	00.022—
Sewerage plant	13,486 18	187 33	13,673 51	13,507 18	166 33	00.058+
Escaped prisoners		701 51	701 51		701 51	00.245+
Transportati'n insane prisoners		48 75	48 75		48 75	00 017+
Loss and gain		426 75	426 75		426 75	00.15 +
Railroad material	2,773 96	1,957 26	4,731 22	2,753 36	1,977 86	00.692+
Salaries		48,445 31	48,445 31		48,445 31	16.946+
Discharged prisoners		1,495 05	1,495 05		1,495 05	00.523+
Allowance lieu board and lodging		2,740 13	2,740 13		2,740 13	00.96 +
Totals	\$112,717 00	\$116,546 38	\$229,263 38	\$116,720 85	\$112,542 53	\$0 39.377

Gross cost \$112,542 53

Sales and earnings—

Farm sales (pasturage)	\$200 22
Officers' and Guards' Mess, sales (meals)	30 68
Prisoners' Mess sales (junk)	52 50
Hospital sales (drugs to officers and guards)	146 07
Ammunition sales to officers and guards	31 20
General Overseer's sales (shop work)	50 82
Turnkey Department sales (clothes)	14 78
Engineer Department sales (junk and lathe work)	334 81
Forage to horses, officers and guards	568 75
Quarry Department sales (blacksmithing and junk)	152 02
Farm Department sales (junk and stock)	69 54
Commissary supplies to officers and guards	789 97
Rent for State houses	1,532 61
Washing for officers and guards	493 07
Cartage by locomotive	410 81
Support of United States prisoners	783 00
Quarry sales (stone and dirt)	919 81
Excess switching over cost running locomotive	288 58

6,869 24

Net cost of maintenance \$105,673 29

Average daily number of prisoners 783.19

Average net per capita per diem 36.96 cents.

TABLE No. 4 B.

Per Capita Maintenance for the Months of July, August, September, October, and November of the 55th Fiscal Year.

	Inventory July 1, 1903.	Issues July 1 to Dec., 1903.	Totals.	Inventory Dec. 1, 1903.	Balances. Gross Cost.	Gross Per Capita Per Diem.
Warden's Mess.....	\$26 97	\$322 34	\$349 31	\$38 91	\$310 40	\$0 00.259—
Officers and Guards' Mess.....	1,887 04	2,888 58	4,775 62	1,855 15	2,920 47	02.442+
Prisoners' Mess.....	4,410 40	10,506 73	14,917 13	4,387 45	10,529 68	08.805+
Hospital.....	2,548 75	432 69	2,981 44	2,594 89	386 55	00 323—
Commissary.....	773 05	65 38	838 43	756 62	81 81	00.068—
General Overseer.....	5,300 85	587 98	5,888 83	5,573 54	315 29	00.263—
Captain of Guard.....	11,417 16	788 60	12,205 76	11,457 91	747 85	00 625—
Turnkey.....	21,276 91	5,603 79	26,880 70	19,289 95	7,590 75	06.347+
Engineer.....	9,540 93	456 26	9,997 19	9,346 45	650 74	00 544—
Prisoners' Laundry.....	660 01	296 39	956 40	646 27	310 13	00.259—
Stock.....	6,319 84	966 09	7,285 93	6,083 15	1,202 78	01.006—
Warden's Office.....	956 59	39 98	996 57	937 36	59 21	00.049+
Clerk's Office.....	1,140 70	42 94	1,183 64	1,091 38	92 26	00.078—
Quarry.....	7,774 28	1,010 47	8,784 75	6,238 65	2,546 10	02.129—
Light.....	12,008 18	433 42	12,441 60	12,058 46	383 14	00.320+
Farm.....	4,781 24	204 93	4,986 17	3,955 94	1,030 23	00.862—
Furniture and fixtures.....	5,792 33	30 31	5,822 64	5,560 34	262 30	00.220+
Ice Plant.....	3,728 18	85 35	3,813 53	3,807 68	5 85	00.005—
Wooded buildings.....	28,232 98	45 66	28,278 64	28,128 99	149 65	00.125+
Officers and Guards' Laundry.....	116 90	70 14	187 04	121 15	65 89	00 056—
Sewerage Plant.....	13,507 18	809 88	14,317 06	13,507 18	809 88	00.677+
Escaped prisoners.....		2,272 85	2,272 85		2,272 85	01 900—
Railroad material.....	2,753 36		2,753 36	2,430 13	323 23	00.270+
Salaries.....		22,303 12	22,303 12		22,303 12	18.651—
Expense.....		985 59	985 59		985 59	00 824—
Discharged prisoners.....		906 50	906 50		906 50	00.758+
Repairs.....		775 77	775 77		775 77	00.649—
Allowance lieu board and lodging.....		1,305 11	1,305 11		1,305 11	01.092—
Sales.....		758 45	758 45		758 45	00.634+
Totals.....	\$144,953 83	\$54,995 30	\$199,949 13	\$139,867 55	\$60,081 58	\$0 50 24

Gross cost..... \$60,081 58

Sales and earnings:

Support of United States prisoners.....	\$230 00
Quarry sales (granite).....	527 57
Quarry sales (blacksmithing and junk).....	19 97
Farm sales (stock and junk).....	38 50
Farm sales (pasturage).....	49 55
Forage, to officers and guards.....	264 50
Rent for State's houses.....	674 38
Sales from commissary to officers and guards.....	1,017 84
Washing for officers and guards.....	216 78
Switching cars and cartage by locomotive.....	384 96
Loss and gain on merchandise.....	136 80
Drugs to officers and guards.....	53 43
Ammunition to officers and guards.....	24 90
Shop work—General Overseer.....	17 36
Clothes—Turnkey.....	16 18
Junk sales—Prison mess.....	18 90
Junk sales and machine work—Engineer.....	5 02
Officers and guards' mess—meal sales.....	30 85
Freight and cartage on merchandise.....	65 19
	3,792 68

Net cost of maintenance..... \$56,288 90

Average daily number of prisoners..... 781.58
Average net per capita per diem..... 47.07+ cents.

TABLE No. 4 C.

Per Capita Maintenance from December 1st, 1903, to July 1st, 1904.

	Inventory Dec. 1, 1903.	Issues Dec. 1, 1903, to July 1, '04	Total.	Inventory July 1, 1904.	Balance Gross Cost.	Gross per Capita per Diem.
Warden's Mess	\$38 91	\$408 17	\$447 08	\$59 41	\$387 67	\$0 00.2169—
Officers and Guards' Mess	1,671 61	4,167 77	5,839 38	1,656 19	4,183 19	02.3395+
Prisoners' Mess	4,326 70	17,266 96	21,593 66	4,350 83	17,242 83	09.6433—
Hospital	2,589 11	542 55	3,131 66	2,505 52	626 14	00.3502—
Commissary	756 62	105 32	861 94	739 39	122 55	00.0685+
General Overseer	5,003 43	390 79	5,394 22	5,135 88	258 34	00.1445—
Captain of Guard	11,256 07	707 97	11,964 04	11,391 61	572 43	00.3201—
Turnkey	15,999 70	8,813 62	24,813 32	17,659 53	7,153 79	04.0009—
Engineer	8,871 45	1,071 02	9,942 47	7,176 96	2,765 51	01.5466—
Laundry	642 62	476 84	1,119 46	662 04	457 42	00.2558+
Stock	4,251 10	1,538 47	5,789 57	4,079 15	1,710 42	00.9566—
Warden's Office	549 55	43 06	592 61	558 27	34 34	00.0192—
Clerk's Office	787 12	244 28	1,031 40	806 83	224 57	00.1256—
Prison Directors		388 28	388 28		388 28	00.2171+
Quarry	5,396 54	1,264 09	6,660 63	5,484 04	1,176 59	00.6580+
Light	6,017 61	594 72	6,612 33	6,417 05	195 28	00.1092—
Farm	3,568 35	525 19	4,093 54	3,683 47	410 07	00.2293+
Expense		1,821 98	1,821 98		1,821 98	01.0190—
Sales		1,170 58	1,170 58		1,170 58	00.6546+
Repairs		619 33	619 33		619 33	00.3463+
Furniture and fixtures	3,759 55		3,759 55	3,674 05	85 50	00.0478+
Ice plant	3,807 68	417 84	4,225 52	3,789 93	435 59	00.2435+
Officers and Guards' laundry	83 65	113 20	196 85	80 18	116 67	00.0652+
Sewerage plant	13,507 18	1,004 18	14,511 36	13,501 43	1,009 93	00.5648—
Escaped prisoners		4,640 00	4,640 00		4,640 00	02.5950+
Transportation of insane prisoners		23 90	23 90		23 90	00.0133+
Loss and gain		12 95	12 95		12 95	00.0072+
Railroad material	2,408 59	62	2,409 21	2,374 79	34 42	00.0192—
Salaries		29,967 16	29,967 16		29,967 16	16.7597+
Discharged prisoners		1,102 60	1,102 60		1,102 60	00.6166+
Allowance in lieu of board and lodging		1,636 28	1,636 28		1,636 28	00.9151+
Totals	\$95,293 14	\$81,079 72	\$176,372 86	\$95,786 55	\$80,586 31	\$0 45.0694+

Gross cost \$80,586 31 |Sales and earnings— |Support of United States prisoners \$947 00 |Quarry sales (granite) 1,243 86 |Quarry sales (blacksmithing) 17 45 |Farm sales (pasturage) 45 75 |Forage to officers and guards 413 50 |Rent for State houses 941 97 |Sales from commissary to officers and guards 1,527 73 |Washing for officers and guards 235 71 |Switching cars and cartage by locomotive 65 40 |Drugs to officers and guards 92 89 |Ammunition to officers and guards 42 53 |Shop work—General Overseer 17 78 |Officers and guards' mess—meal sales 9 80 |Freight and cartage on merchandise 289 50 |

5,890 87

Net cost of maintenance \$74,695 44 |Average daily number of prisoners 839.46 |Average net per capita per diem 41.7748+ cents. |

TABLE No. 5 A.

Assets and Liabilities, July 1, 1903.

AVAILABLE ASSETS:			
Cash on hand		\$909 91	
Cash balance, State Treasury (Prison Fund)		31,531 65	
Cash balance, State Treasury (General Fund)—			
Salaries	\$3,954 15		
Support	5,015 17		
		8,969 32	
Due from sundry debtors		1,004 38	
			\$42,415 26
LIABILITIES:			
Unpaid supply claims for June, 1903 (General Fund)	\$5,015 17		
Unpaid supply claims for June, 1903 (Prison Fund)	2,317 76		
Unpaid salaries for June, 1903	3,954 15		
Amount due sundry creditors	40 31		
			11,327 39
Excess of available assets			\$31,087 87
PERMANENT ASSETS:			
Warden's Mess		\$26 97	
Officers and Guards' Mess		1,887 04	
Prisoners' Mess		4,410 40	
Hospital		2,548 75	
Commissary		773 05	
General Overseer		5,300 85	
Captain of Guard		11,417 16	
Turnkey		21,276 91	
Engineer		9,540 93	
Laundry		660 01	
Stock		6,319 84	
Warden's Office		956 59	
Clerk's Office		1,140 70	
Quarry		7,774 28	
Light		12,008 18	
Farm		4,781 24	
Furniture and fixtures (Warden's House)		5,792 33	
Prison improvements		668,298 46	
Ice plant		3,728 18	
Wooden buildings		28,232 98	
Officers and Guards' Laundry		116 90	
Sewerage plant		13,507 18	
Merchandise		6,642 71	
Railroad material		2,753 36	
Real estate		15,000 00	
			834,895 00
Total excess of assets			\$865,982 87

TABLE No. 5 B.

Assets and Liabilities, July 1, 1904.

AVAILABLE ASSETS:		
Cash on hand.....	\$653 78	
Cash balance, State Treasury (Prison Fund).....	25,857 83	
Cash balance, State Treasury (General Fund)—		
Salaries.....	\$5,298 74	
Support.....	10,836 11	
	16,134 85	
Cash balance, State Treasury (Sewerage Fund).....	1,875 25	
Cash balance, State Treasury (Air-Compressor Fund).....	10,000 00	
Cash balance, State Treasury (Insane Building Fund).....	25,000 00	
Due from sundry debtors.....	1,706 87	
		\$81,228 58
LIABILITIES:		
Unpaid support claims for May, 1904 (General Fund).....	\$5,414 55	
Unpaid support claims for May, 1904 (Prison Fund).....	973 84	
Unpaid support claims for June, 1904 (General Fund).....	5,420 29	
Unpaid support claims for June, 1904 (Prison Fund).....	1,788 11	
Unpaid salary claims for June, 1904 (General Fund).....	4,059 15	
Unpaid sewerage claims for June, 1904 (Sewerage Fund).....	878 00	
Amount due sundry creditors.....	23 39	
		18,557 33
Excess of available assets.....		\$62,671 25
PERMANENT ASSETS:		
Warden's Mess.....	\$59 41	
Officers and Guards' Mess.....	1,656 19	
Prisoners' Mess.....	4,350 83	
Hospital.....	2,505 52	
Commissary.....	739 39	
General Overseer.....	5,135 88	
Captain of Guard.....	11,391 61	
Turnkey.....	17,659 53	
Engineer.....	7,176 96	
Laundry.....	662 04	
Stock.....	4,079 15	
Warden's Office.....	558 27	
Clerk's Office.....	806 83	
Quarry.....	5,484 04	
Light.....	6,417 05	
Farm.....	3,683 47	
Furniture and fixtures (Warden's House).....	3,674 05	
Prison improvement.....	668,755 66	
Ice plant.....	3,789 93	
Wooden buildings.....	28,175 25	
Officers and Guards' Laundry.....	80 18	
Sewerage plant.....	13,501 43	
Merchandise.....	4,873 72	
Railroad material.....	2,374 79	
Real estate.....	15,000 00	
		812,591 18
Total excess of assets.....		\$875,262 43

TABLE No. 6 A.—Trial Balance at the end of the Fifty-fourth Fiscal Year, ending June 30, 1903.

	Trial Balance, June 30, 1903.		Inventory July 1, 1903.	State Prison at Folsom July 1, 1903.		Trial Balance, July 1, 1903.
	Dr.	Cr.		Dr.	Cr.	
Cash.....	\$909 91			\$681 17		\$909 91
Warden's Mess.....	708 14		\$26 97			26 97
Pasturage account.....		\$200 22			\$200 22	
Officers and Guards' Mess.....	7,737 77	30 68	1,887 04	5,850 73	30 68	1,887 04
Officers and Guards' Mess, meal sales.....						
Prisoners' Mess.....	30,728 68		4,410 40	26,318 28		4,410 40
Prisoners' Mess, sales.....					52 50	
Hospital.....	3,404 98		2,548 75	856 23		2,548 75
Hospital sales.....		146 07			146 07	
Commissary.....	1,034 44		773 05	261 39		773 05
Ammunition sales.....		31 20			31 20	
General Overseer.....	5,787 22		5,300 85	486 37		5,300 85
General Overseer, sales.....		50 82			50 82	
Captain of Guard.....	12,349 38		11,417 16	932 22		11,417 16
Turnkey Department.....	31,649 95		21,276 91	10,373 04		21,276 91
Turnkey Department, sales.....		14 78			14 78	
Engineer Department.....	10,780 38		9,540 93	1,239 45		9,540 93
Engineer Department, sales.....					334 81	
Laundry Department.....	1,058 83		660 01	398 82		660 01
Stock Department.....	7,278 07		6,319 84	958 23		6,319 84
Stock rental.....		1,040 00			1,040 00	
Forage account.....		568 75			568 75	
Warden's Office.....	1,022 98		956 59	66 39		956 59
Clerk's Office.....	1,310 41		1,140 70	169 71		1,140 70
Prison Directors.....	418 95			418 95		
Quarry Department.....	7,979 94		7,774 28	205 66		7,774 28
Quarry Department, sales.....		152 02			152 02	
Light Department.....	14,012 06		12,008 18	2,003 88		12,008 18
Farm Department.....	5,135 20		4,781 24	353 96		4,781 24
Farm Department, sales.....		69 54			69 54	
Expense account.....	2,285 93			2,285 93		
Sales account.....		789 97			789 97	
Repairs.....	1,287 99			1,287 99		
Rental account.....		1,532 61			1,532 61	
Rock crusher.....		16 92				
Furniture and fixtures (Warden's House).....	5,952 85		5,792 33	160 52		5,792 33
United States of America.....	227 50					227 50
Prison improvement.....	668,298 46		668,298 46			668,298 46
Ice Plant.....	4,897 81		3,728 18	1,169 63		3,728 18
						\$16 92

Wooden buildings	28,232 98	493 07	28,232 98	62 29	493 07	28,232 98
Officers and Guards' Laundry	179 19		116 90			116 90
Officers and Guards' Laundry sales						
Sewerage Plant	13,673 51		13,507 18	166 33		13,507 18
Merchandise	6,642 71		6,642 71			6,642 71
Escaped prisoners	701 51			701 51		
Transportation insane prisoners	48 75			48 75		
Loss and gain	426 75			426 75		
Freight and cartage		410 81			410 81	
State Prison at Folsom	4,731 22	847,215 76		1,977 86	847,215 76	857,013 55
Railroad material	15,000 00		2,753 36			2,753 36
Real estate			15,000 00			15,000 00
Rock-crusher surplus	48,445 31	365 11		48,445 31	365 11	
Salaries		7,332 93				7,332 93
Sundry creditors						
Switching account, Southern Pacific Co.	241 00	783 00			783 00	241 00
United States prisoners				1,495 05		
Discharged prisoners	1,495 05			2,740 13		
Allowance in lieu of board and lodging	2,740 13					
Sundry officers and guards		3,954 15				3,954 15
State Treasury, Prison Fund	31,531 65	66,579 81			66,579 81	31,531 65
General Appropriation—Support 54th year		47,486 16			47,486 16	
General Appropriation—Salaries 54th year		919 81			919 81	
Quarry sales		288 58			288 58	
Locomotive account						
Sundry debtors						
Southern Pacific Co.	119 00					119 00
J. S. Bogges	7 00					7 00
J. M. Cress	3 00					3 00
C. W. Nickerson	1 50					1 50
C. S. Brooks	2 00					2 00
C. W. Coburn	5 00					5 00
Sutter County	1 00					1 00
J. D. Shearer						
B. F. Smith	2 19					2 19
J. L. House	1 92					1 92
T. I. Barron						
V. M. Colt	9 82					9 82
	329 93					329 93
Sacramento Electric, Gas and Ry. Co.		19 28				19 28
James Carroll	13 76					13 76
Blue Ravine Mine	25					25
Sacramento City	23 00					23 00
Prosperity Mining Co.	19 62					19 62
Bal. to Cr. State Prison at Folsom July 1, 1903		857,013 55				
Totals	\$980,883 47	\$980,883 47	\$834,895 00	\$969,556 08	\$969,556 08	\$868,340 94

TABLE No. 6 B.—*Trial Balance December 1, 1903.*

	Trial Balance, November 30, 1903.		Inventory, Nov. 30, 1903.	State Prison at Folsom, December 1, 1903.		Trial Balance, December 1, 1903.	
	Dr.	Cr.		Dr.	Cr.	Dr.	Cr.
Cash.....	\$7,189 34					\$7,189 34	
Warden's Mess.....	349 31		\$38 91	\$310 40		38 91	
Pasturage account.....		\$49 55			\$49 55		
Officers and Guards' Mess.....	4,775 62		1,855 15	2,920 47		1,855 15	
Officers and Guards' Mess, meal sales.....		30 85			30 85		
Prisoners' Mess.....	14,917 13		4,387 45	10,529 68		4,387 45	
Prisoners' Mess, sales.....		18 90			18 90		
Hospital.....	2,981 44		2,594 89	386 55		2,594 89	
Hospital sales.....		53 43			53 43		
Commissary.....	838 43		756 62	81 81		756 62	
Ammunition sales.....		24 90			24 90		
General Overseer.....	5,888 83		5,573 54	315 29		5,573 54	
General Overseer, sales.....		17 36			17 36		
Captain of Guard.....	12,205 76		11,457 91	747 85		11,457 91	
Turnkey Department.....	26,880 70		19,289 95	7,590 75		19,289 95	
Turnkey Department, sales.....		16 18			16 18		
Engineer Department.....	9,997 19		9,346 45	650 74		9,346 45	
Engineer Department, sales.....		5 02			5 02		
Laundry.....	956 40		646 27	310 13		646 27	
Stock rentals.....		380 00			380 00		
Stock Department.....	7,285 93		6,083 15	1,202 78		6,083 15	
Forage.....		264 50			264 50		
Warden's Office.....	996 57		937 36	59 21		937 36	
Clerk's Office.....	1,183 64		1,091 38	92 26		1,091 38	
Quarry Department.....	8,784 75		6,238 65	2,546 10		6,238 65	
Quarry Department, sales.....		19 97			19 97		
Light Department.....	12,441 60		12,058 46	383 14		12,058 46	
Farm.....	4,986 17		3,955 94	1,030 23		3,955 94	
Farm sales.....		38 50			38 50		
Expense.....	985 59			985 59			
Sales account.....		259 39			259 39		
Repairs.....	775 77			775 77			
Rental account.....		674 38			674 38		
Rock-crusher.....	40 42					40 42	
Furniture and fixtures (Warden's House).....	5,822 64		5,560 34	262 30		5,560 34	
Prison improvement.....	668,753 44		668,397 17	356 27		668,397 17	

Ice Plant	3,813 53	3,807 68	5 85	216 78	3,807 68
Wooden buildings	28,278 64	28,128 99	149 65		28,128 99
Officers and Guards' Laundry	187 04	121 15	65 89	216 78	121 15
Officers and Guards' Laundry, sales					
Merchandise	14,317 06	13,507 18	809 88		13,507 18
Escaped prisoners	5,370 89	5,370 89			5,370 89
Loss and gain	2,272 85		2,272 85		
Freight and cartage				136 80	
State Prison at Folsom				65 19	
Railroad material	2,753 36			857,013 55	848,467 70
Real estate	15,000 00	2,430 13	323 23		2,430 13
Sewerage Fund				371 46	15,000 00
Rock-Crusher Surplus Fund				38 87	
Salaries	22,303 12		22,303 12		
Sundry creditors					11,237 76
Switching account, Southern Pacific Co.	216 00				216 00
United States prisoners				230 00	
Discharged prisoners	906 50		906 50		
Allowance in lieu of board and lodging	1,305 11		1,305 11		
Sundry officers and guards				4,397 51	4,397 51
State Treasury—Prison Fund	27,523 02				27,523 02
General Appropriation—Support 55th year				25,899 90	
General Appropriation—Salaries 54th year				3,954 15	
General Appropriation—Salaries 55th year				17,454 94	
Quarry sales				527 57	
Southern Pacific Co.	85 00				85 00
Locomotive account				384 96	
Sundry debtors	32 50				32 50
B. F. Smith				2 19	2 19
J. L. House				1 92	1 92
T. I. Barron					
V. M. Colt	9 82				9 82
Sacramento Electric, Gas and Railway Co.	329 93				329 93
Sacramento County					
Blue Ravine Mine	1 00				1 00
Prosperity Mining Co.	60				60
Board of Public Works	19 62				19 62
A. Teichert	10 50				10 50
Board of Education	3 50				3 50
City of Sacramento	14 00				14 00
Central Electric Co.	7 00				7 00
Bal. to Cr. of State Prison at Folsom, Dec. 1, 1903.	1 00		848,467 70		1 00
Totals	\$223,798 26	\$223,798 26	\$903,147 10	\$903,147 10	\$864,118 86
					\$864,118 86

TABLE No. 6 C.

Trial Balance at the end of the Fifty-fifth Fiscal Year, ending June 30, 1904.

	Trial Balance, June 30, 1904.		Inventory, July 1, 1904.	State Prison at Folsom, July 1, 1904.		Trial Balance, July 1, 1904.	
	Dr.	Cr.		Dr.	Cr.	Dr.	Cr.
Cash.....	\$653 78					\$653 78	
Warden's Mess.....	447 08		\$59 41	\$387 67		59 41	
Pasturage account.....							
Officers and Guards' Mess.....	5,839 38		1,656 19	4,183 19		1,656 19	
Prisoners' Mess.....	21,593 66		4,350 83	17,242 83	9 80	4,350 83	
Hospital.....	3,131 66		2,505 52	626 14		2,505 52	
Hospital sales.....					92 89		
Commissary.....	861 94		739 39	122 55		739 39	
Ammunition sales.....					42 53		
General Overseer.....	5,394 22		5,135 88	258 34		5,135 88	
General Overseer, sales.....					17 78		
Captain of Guards.....	11,964 04		11,391 61	572 43		11,391 61	
Turnkey Department.....	24,813 32		17,659 53	7,153 79		17,659 53	
Engineer Department.....	9,942 47		7,176 96	2,765 51		7,176 96	
Laundry Department.....	1,119 46		662 04	457 42		662 04	
Stock rentals.....					490 00		
Stock Department.....	5,789 57		4,079 15	1,710 42		4,079 15	
Forage.....					413 50		
Warden's Office.....	592 61		558 27	34 34		558 27	
Clerk's Office.....	1,031 40		806 83	224 57		806 83	
Prison Directors.....	388 28			388 28			
Quarry Department.....	6,660 63		5,484 04	1,176 59		5,484 04	
Quarry Department, sales.....					17 45		
Light Department.....	6,612 33		6,417 05	195 28		6,417 05	
Farm Department.....	4,093 54		3,683 47	410 07		3,683 47	
Expense account.....	1,821 98			1,821 98			
Sales account.....					357 15		
Repairs.....	619 33			619 33			
Rentals.....					941 97		

Rock-crusher	292 49				292 49
Furniture and fixtures (Warden's house)	3,759 55				3,674 05
United States of America	429 70				429 70
Prison improvement	669 245 66				668,755 66
Ice Plant	4,225 52				3,789 93
Wooden buildings	28,175 25				28,175 25
Officers and Guards' Laundry	196 85				80 18
Officers and Guards' Laundry, sales		235 71			
Sewerage Plant	14,511 36				13,501 43
Merchandise	4,873 72				4,873 72
Escaped prisoners	4,640 00				
Transportation of insane prisoners	23 90				
Loss and gain	12 95				
Freight and cartage		289 50			
State Prison at Folsom	832,022 28				832,022 28
Railroad material	2,409 21				2,374 79
Real estate	15,000 00				15,000 00
Rock crusher Surplus Fund		1,895 51			
Salaries	29,967 16				29,967 16
Sundry creditors	14,479 29				14,479 29
Switching account, Southern Pacific Co.	239 00				239 00
United States prisoners		947 00			
Discharged prisoners	1,102 60				
Allowance in lieu of board and lodging	1,636 28				
Sundry officers and guards					
State Treasury—Prison Fund	4,059 15				4,059 15
General Appropriation—Support, 55th year	33,279 16				33,279 16
General Appropriation—Salaries, 55th year	29,746 32				29,746 32
Quarry sales	1,243 86				1,243 86
Southern Pacific Company	328 50				328 50
Locomotive account	65 40				65 40
Sundry debtors	50 29				50 29
B. F. Smith	2 19				2 19
J. L. House	1 92				1 92
T. I. Barron					
V. M. Colt	9 82				9 82
Prosperity Mining Company	329 93				329 93
Sacramento City	19 62				19 62
Sacramento Electric, Gas & Railway Co.	5 52				5 52
Sacramento County	2 00				2 00
Bal. to Cr. of State Prison at Folsom July 1, 1904					19 28
Totals	\$920,715 39	\$920,715 39	\$812,591 18	\$902,153 56	\$840,809 66
					\$840,809 66

TABLE No. 7.

*Receipts from Farm for the Two Fiscal Years ending June 30, 1903, and
June 30, 1904.*

Product.	1902-1903.	1903-1904.	Total Biennial Product.
Artichokes	6 doz.	48 doz.	54 doz.
Apricots	150 lbs.	200 lbs.	350 lbs.
Beans, string	692 lbs.	1,861 lbs.	2,553 lbs.
Beans, Lima	237 lbs.	803 lbs.	1,040 lbs.
Beets	585 lbs.	4,321 lbs.	4,906 lbs.
Blackberries	261 lbs.		261 lbs.
Celery	57 $\frac{1}{2}$ doz.	130 doz.	187 $\frac{1}{2}$ doz.
Corn	553 $\frac{1}{2}$ doz.	355 doz.	908 $\frac{1}{2}$ doz.
Cauliflower	53 $\frac{1}{2}$ doz.	53 doz.	106 $\frac{1}{2}$ doz.
Cucumbers	446 $\frac{1}{4}$ doz.	375 doz.	821 $\frac{1}{4}$ doz.
Cabbage	611 $\frac{1}{2}$ lbs.	2,480 lbs.	3,091 $\frac{1}{2}$ lbs.
Carrots	4,224 lbs.	3,687 lbs.	7,911 lbs.
Egg plant	1,897 lbs.	496 lbs.	2,393 lbs.
Eggs	25 doz.		25 doz.
Eggs, milk, and chickens*	\$120.00	\$120.00	\$240.00
Grapes	8,325 lbs.	18,470 lbs.	26,795 lbs.
Hay	155 tons.	100 tons.	255 tons.
Lettuce	477 $\frac{1}{2}$ doz.	591 doz.	1,068 $\frac{1}{2}$ doz.
Milk	9,942 $\frac{3}{4}$ gal.	12,242 gal.	22,184 $\frac{3}{4}$ gal.
Melons, musk	29 $\frac{1}{2}$ doz.	23 doz.	52 $\frac{1}{2}$ doz.
Melons, water	4 doz.		4 doz.
Onions, green	200 $\frac{5}{8}$ doz.	810 doz.	1,010 $\frac{5}{8}$ doz.
Onions, dry	4,950 lbs.	2 lbs.	4,952 lbs.
Oranges	391 $\frac{1}{2}$ doz.	409 doz.	448 $\frac{1}{2}$ doz.
Oyster plant	84 lbs.	248 lbs.	332 lbs.
Peaches	6,530 lbs.	2,200 lbs.	8,730 lbs.
Parsnips	45 lbs.	569 lbs.	614 lbs.
Peas	1,019 lbs.	336 lbs.	1,355 lbs.
Plums	125 lbs.	150 lbs.	275 lbs.
Pumpkins	4,764 lbs.	9,949 lbs.	14,713 lbs.
Parsley	2 lbs.	10 lbs.	12 lbs.
Peppers, green	312 $\frac{1}{2}$ doz.	737 doz.	1,049 $\frac{1}{2}$ doz.
Potatoes, sweet	255 lbs.	333 lbs.	588 lbs.
Potatoes, Irish	915 lbs.	820 lbs.	1,735 lbs.
Pork	2,835 lbs.	4,261 lbs.	7,096 lbs.
Rhubarb	708 lbs.	1,187 lbs.	1,895 lbs.
Radishes	71 $\frac{1}{2}$ doz.	28 doz.	99 $\frac{1}{2}$ doz.
Squash	4,857 lbs.	2,632 lbs.	7,489 lbs.
Spinach	1,951 lbs.	823 lbs.	2,774 lbs.
Tomatoes	44,615 lbs.	70,069 lbs.	114,684 lbs.
Turnips	4,326 lbs.	8,375 lbs.	12,701 lbs.
Strawberries		40 lbs.	40 lbs.
Figs		200 lbs.	200 lbs.
Kale		1,982 lbs.	1,982 lbs.

* Estimated.

TABLE No. 8 A—Meals Served at Officers and Guards' Mess during the Fiscal Year beginning July 1, 1902, and ending June 30, 1903.

Month.	Regulars.	Visitors.	Sheriffs.	Ministers.	Prisoners.	Cooks and Waiters.	Lunches to Guards.	Lunches to Band.	Night Guards.	Extras.	Totals.
1902—July	4,580	43	23	10	836	1,214	666	91	603	4	8,070
August	4,631	22	23	14	899	1,116	571	110	643	6	8,035
September	4,672	80	36	14	998	1,080	557	88	620	10	8,155
October	4,372	44	38	11	983	1,111	635	38	589	5	7,826
November	4,014	20	29	13	938	1,080	617	111	570	3	7,395
December	4,218	28	22	13	934	1,116	671	92	589	5	7,688
1903—January	4,367	39	25	8	886	1,416	833	97	593	20	8,284
February	3,920	96	52	12	825	1,008	747	100	582	13	7,355
March	4,297	58	34	11	907	1,142	652	125	611	---	7,837
April	4,241	33	25	9	883	1,131	772	100	570	---	7,784
May	4,241	43	31	11	914	1,116	810	127	589	---	7,882
June	4,231	84	37	10	923	1,080	820	100	570	---	7,905
Totals	51,834	590	375	136	10,926	13,610	8,351	1,179	7,129	66	94,196
Net cost for year 1902-03	\$5,634 57										
Total number of meals furnished										94,196	
										Average cost per meal	.0603+

TABLE No. 8 B—Meals Served at Officers and Guards' Mess during the Fiscal Year beginning July 1, 1903, and ending June 30, 1904.

Month.	Regulars.	Visitors.	Sheriffs.	Ministers.	Prisoners.	Cooks and Waiters.	Lunches to Guards.	Lunches to Band.	Night Guards.	Extras.	Totals.
1903—July	4,360	351	25	13	1,194	1,116	1,329	100	650	9	9,147
August	5,199	136	22	10	1,130	1,116	1,102	74	606	60	9,455
September	4,827	47	14	55	1,115	1,080	833	98	557	17	8,643
October	5,106	101	45	10	1,266	1,116	1,104	48	589	22	9,407
November	4,867	109	34	10	1,208	1,110	954	120	606	4	9,022
December	5,009	33	39	10	257	1,196	771	96	593	12	8,016
1904—January	4,978	67	104	12	102	1,116	720	120	608	1	7,828
February	4,563	30	102	12	103	1,056	698	96	573	5	7,238
March	4,989	40	78	12	93	1,116	725	96	626	1	7,776
April	4,864	33	65	12	90	1,080	706	96	686	2	7,636
May	5,081	19	67	12	96	1,116	730	104	607	3	7,835
June	4,840	42	67	18	118	1,080	750	84	634	7	7,640
Totals	58,683	1,008	662	186	6,772	13,298	10,422	1,132	7,337	143	99,643
Net cost for year 1903-04	\$7,287 20										
Total number of meals furnished										99,643	
										Average cost per meal	.07313+

TABLE No. 9.—*Rock-Crusher Transactions*

COST OF ROCK-CRUSHER PLANT.		
Cash received from General Fund.....	\$24,985 61	
Cash received from Revolving Fund.....	4,805 35	
		\$29,790 96
Cash received from special appropriation, Von Geldern.....		344 80
Total cost of plant.....		\$30,135 76
COST OF CRUSHING ROCK.		
Rock-crusher expenditures and claims due June 30, 1897.....		\$47,492 39
Inventory July 1, 1897.....		33,009 78
Cost of crushing 84,785. ³⁰⁵ ₁₀₀₀ tons of rock.....		\$14,482 61
Cost per ton, 1896-1897.....	17.199 cents.	
Inventory July 1, 1897.....	\$33,009 78	
Supply purchases to June 30, 1898.....	18,387 12	
		\$51,396 90
Inventory July 1, 1898.....		34,834 55
Cost of crushing 79,996 ¹ / ₄ tons of rock.....		\$16,562 35
Cost per ton, 1897-1898.....	20.7 cents.	
Inventory July 1, 1898.....	\$34,834 55	
Supply purchases to June 30, 1899.....	9,088 53	
		\$43,923 08
Inventory July 1, 1899.....		34,682 94
Cost of crushing 34,840. ²⁸⁰ ₂₀₀ tons of rock.....		\$9,240 14
Cost per ton, 1898-1899.....	26.5 cents.	
Inventory July 1, 1899.....	\$34,682 94	
Supply purchases to June 30, 1900.....	8,002 93	
		\$42,685 87
Inventory July 1, 1900.....		34,448 13
Cost of crushing 32,748. ¹ / ₂₀₀ tons of rock.....		\$8,237 74
Cost per ton, 1899-1900.....	25.15 cents.	
Inventory July 1, 1900.....	\$34,448 13	
Supply purchases to June 30, 1901.....	9,804 40	
Less rebates on supplies.....	19 37	
		9,785 03
		\$44,233 16
Inventory July 1, 1901.....	\$17,130 93	
Loss by fire June 20, 1901 (estimated).....	17,097 20	
		34,228 13
Cost of crushing 45,217. ¹³³ ₃₀₀ tons of rock.....		\$10,005 03
Cost per ton, 1900-1901 (estimated).....	22.13 cents.	
Inventory July 1, 1901.....	\$17,130 93	
Rebuilding account.....	6,441 06	
Supply purchases to June 30, 1902.....	8,866 71	
		\$32,438 70
Inventory July 1, 1902.....		23,987 20
Cost of crushing 32,631. ⁸⁵ ₂₀₀ tons of rock.....		\$8,451 50
Cost per ton, 1901-1902.....	25.90 cents.	
Inventory July 1, 1902.....	\$23,987 20	
Supply purchases to June 30, 1903.....	18,788 55	
Less rebates on supplies (\$55.18 and \$1.05).....	56 23	
		18,732 32
		\$42,719 52
Inventory July 1, 1903.....		23,828 69
Cost of crushing 68,026. ¹⁹⁷ ₃₀₀ tons of rock.....		\$18,890 83
Cost per ton, 1902-1903.....	27.77 cents.	
Inventory July 1, 1903.....	\$23,828 69	
Supply purchases to June 30, 1904.....	14,566 11	
		\$38,394 80
Inventory July 1, 1904.....		22,809 30
Cost of crushing 60,064. ¹⁶² ₃₀₀ tons of rock.....		\$15,585 50
Cost per ton, 1903-1904.....	25.95 cents.	
Cost of crushing 438,314. ²⁴⁰ ₂₀₀₀ tons of rock from June 10, 1896, to June 30, 1904.....		\$101,455 70
Cost per ton.....	23.14+ cents.	
PROFIT OF CRUSHING ROCK.		
129,998,480 pounds sold at 25 cents per ton.....	\$16,249 82	
703,467,180 pounds sold at 30 cents per ton.....	105,521 74	
43,163,080 pounds sold at 35 cents per ton.....	7,553 59	
		\$129,325 15
876,628,740 pounds crushed at cost of 23.14+ cents per ton.....		101,455 70
Total profit from June 10, 1896, to July 1, 1904.....		\$27,869 45

from June 10, 1896, to July 1, 1904.

CASH ASSETS AND LIABILITIES JULY 1, 1904.

<i>Cash Assets.</i>		
Cash on hand June 30, 1904	\$4,353 07	
Amount in Revolving Fund	4,635 00	
		\$8,988 07
Due from sundry debtors—		
Southern Pacific Company	\$706 37	
Sacramento County	66 94	
Sacramento City	41 63	
Sacramento Electric, Gas and Railway Co.	1,750 92	
John Craven	2 09	
Yolo County	19 11	
C. D. Shearer	10 43	
Sutter County	94 89	
Folsom Machine Co.	21 00	
Yuba City Cemetery	21 47	
W. A. Gett	21 98	
Fred. W. Kiesel	8 09	
Suspense account	8 10	
		2,773 02
		\$11,761 09
<i>Liabilities.</i>		
Due sundry creditors, June 30, 1904	\$2,671 42	
Due for macadam prepaid—		
Adolph Teichert	\$25 00	
W. J. Comfort	6 85	
Henry Dehn	1 52	
J. A. McAfee	65	
Pacific Construction Co.	9 00	
J. F. Hoerl	3 47	
Modesto Lumber Co.	2 85	
Carlaw Brothers	20	
Turner Brothers	27 46	
Clark & Henery	103 33	
James McGillivray	73 18	
T. M. Burns	18 55	
James Scholefield	2 25	
D. E. Brown	3 44	
John & M. Hughes	37 96	
W. S. Collins	4 87	
Carroll & Douglas	13	
W. F. Fairchild	23 75	
A. Hatt Warehouse and Lumber Co.	45 85	
		390 31
		3,061 73
Cash assets available		\$8,699 36

SALES AND DISPOSAL OF SALE PROCEEDS.

15,260 cars = 438,314⁷⁴⁰/₂₀₀₀ tons = 876,628,740 pounds shipped.

129,998,480 pounds at 25 cents per ton	\$16,249 82	
703,467,180 pounds at 30 cents per ton	105,521 74	
43,163,080 pounds at 35 cents per ton	7,553 59	
876,628,740 pounds	\$129,325 15	
Sales other than macadam	75 60	
		\$129,400 75
Deposited in Revolving Fund	\$108,080 69	
Deposited in General Fund	1,237 13	
Deposited in State Prison at Folsom Fund	13,347 15	
Cash on hand	\$4,353 07	
Less macadam prepaid	390 31	
		3,962 76
Due for macadam sold	2,773 02	
		\$129,400 75

TABLE No. 10.

Road Metal Crushed and Shipped from June 10, 1896, to June 30, 1904.

Months and Years.	No. Cars Shipped.	Size of Crushed Rock in Pounds.			Total Weights in Pounds.	Value of Crushed Rock.			Total Value.
		2½-Inch.	1½-Inch.	¾-Inch.		25c. Ton.	30c. Ton.	35c. Ton.	
1896—June	112	2,801,760	1,584,600	1,528,200	5,914,560	\$739 32	-----	-----	\$739 32
July	161	4,050,800	2,136,950	2,487,950	8,675,700	1,084 47	-----	-----	1,084 47
August	303	7,264,670	4,022,260	4,581,720	15,868,650	1,983 57	-----	-----	1,983 57
September	331	9,611,750	4,215,400	4,181,710	18,008,860	2,251 10	-----	-----	2,251 10
October	333	9,010,545	4,009,825	4,809,960	17,830,330	2,228 79	-----	-----	2,228 79
November	247	6,621,880	2,837,950	3,269,050	12,728,880	1,591 11	-----	-----	1,591 11
December	270	7,486,100	3,935,100	3,233,450	14,654,650	1,831 83	-----	-----	1,831 83
1897—January	189	5,143,850	2,642,800	2,239,860	10,026,510	1,253 32	-----	-----	1,253 32
February	83	1,927,460	1,289,400	1,212,260	4,429,120	553 64	-----	-----	553 64
March to 11th	20	477,150	311,500	272,600	1,061,350	132 67	-----	-----	132 67
March to 31st	118	1,889,760	2,663,680	1,773,800	6,327,240	778 22	\$15 23	-----	793 45
April	184	4,757,510	2,686,610	2,367,950	9,812,070	508 28	-----	-----	1,370 17
May	415	10,575,910	6,316,610	5,491,960	22,384,480	1,140 97	1,988 51	-----	3,129 48
June	400	9,396,740	6,910,720	5,540,750	21,848,210	172 53	3,070 19	-----	3,242 72
1897—July	285	6,767,490	4,701,290	4,023,810	15,492,590	-----	2,323 89	-----	2,323 89
August	284	6,533,100	4,744,750	3,973,160	15,256,010	-----	2,288 42	-----	2,288 42
September	328	8,663,700	4,206,750	4,393,370	17,263,820	-----	2,589 57	-----	2,589 57
October	342	9,239,410	5,206,800	4,420,710	18,866,920	-----	2,830 04	-----	2,830 04
November	350	9,282,100	5,433,350	4,834,560	19,550,010	-----	2,932 50	-----	2,932 50
December	332	7,374,000	6,313,600	4,574,150	18,261,750	-----	2,739 26	-----	2,739 26
1898—January	146	1,598,550	3,911,260	2,703,250	8,213,060	-----	1,231 96	-----	1,231 96
February	12	401,100	170,400	110,650	682,150	-----	102 32	-----	102 32
March	127	2,395,150	2,628,350	2,304,370	7,328,470	-----	1,099 27	-----	1,099 27
April	180	3,631,110	4,176,750	2,514,950	10,322,810	-----	1,548 42	-----	1,548 42
May	245	6,842,750	3,790,410	3,398,300	14,031,460	-----	2,104 72	-----	2,104 72
June	261	5,181,750	5,201,850	4,339,850	14,723,450	-----	2,208 52	-----	2,208 52
1898—July	106	1,494,900	1,932,000	2,221,450	5,648,350	-----	847 26	-----	847 26
August	69	1,956,400	110,450	1,780,100	3,846,950	-----	577 06	-----	577 06

1898—September	103	1,318,250	3,430,950	1,177,310	5,926,510	888 97	888 97
October	167	2,934,850	2,960,000	3,646,450	9,541,300	1,431 21	1,431 21
November	129	2,295,950	3,206,650	1,816,450	7,289,050	1,093 38	1,093 38
December	40	225,850	1,173,150	861,500	2,260,500	339 09	339 09
1899—January	58	272,050	1,416,350	1,575,400	3,263,800	489 58	489 58
February	73	175,850	680,150	3,332,450	4,188,450	628 28	628 28
March	46	55,850	748,850	1,865,950	2,660,650	399 13	399 13
April	125	1,617,100	3,038,600	2,514,600	7,170,300	1,075 59	1,075 59
May	170	4,593,470	2,538,050	2,421,260	9,552,780	1,432 93	1,432 93
June	151	2,625,310	3,602,750	2,111,350	8,339,410	1,250 93	1,250 93
1899—July	53	479,350	1,150,000	1,248,950	2,878,300	431 73	431 73
August	60	1,005,050	996,870	1,365,160	2,367,080	505 08	505 08
September	86	2,482,500	919,600	1,523,500	4,925,600	738 87	738 87
October	52	610,200	1,186,350	1,132,380	2,928,930	439 34	439 34
November	113	1,939,600	2,970,560	1,797,750	6,707,910	1,006 22	1,006 22
December	131	2,516,010	3,164,110	2,279,950	7,960,070	1,194 02	1,194 02
1900—January	134	2,378,850	3,409,610	2,185,530	7,973,990	1,196 12	1,196 12
February	85	665,250	2,182,470	2,000,960	4,848,680	727 33	727 33
March	113	436,250	3,187,850	3,203,260	6,827,350	1,024 15	1,024 15
April	88	1,139,450	2,157,450	1,816,960	5,113,860	767 10	767 10
May	73	526,550	2,687,560	986,050	4,200,160	630 05	630 05
June	137	2,948,000	2,631,800	2,184,280	7,764,080	1,164 63	1,164 63
1900—July	172	2,847,800	4,308,700	2,219,000	9,435,500	1,415 36	1,415 36
August	151	3,280,400	3,609,200	1,640,650	8,530,250	1,279 53	1,279 53
September	165	3,534,550	3,639,700	2,031,000	9,210,250	1,381 55	1,381 55
October	194	4,168,450	4,850,810	1,780,900	10,798,160	1,619 74	1,619 74
November	193	2,830,250	5,599,300	2,016,480	10,445,980	1,566 87	1,566 87
December	167	825,750	6,473,440	1,939,550	9,238,740	1,385 86	1,385 86
1901—January	138	665,250	5,541,000	1,338,550	7,544,800	1,131 76	1,131 76
February	112	977,300	4,380,950	1,014,660	6,372,910	955 95	955 95
March	117	732,050	3,948,250	2,000,100	6,680,400	1,002 12	1,002 12
April	44	863,250	896,050	696,850	2,458,150	368 45	368 45
May	85	1,368,850	2,436,100	873,450	4,678,400	701 76	701 76
June	96	966,970	3,105,650	971,770	5,044,390	756 70	756 70
1901—November	15		705,850	118,600	824,450	123 67	123 67
December	200	3,913,400	4,955,700	2,616,150	11,485,250	1,722 79	1,722 79
1902—January	169	1,007,600	6,539,250	2,173,910	9,742,750	1,461 47	1,461 47
February	138	462,650	5,300,850	2,393,000	8,156,500	1,223 51	1,223 51
March	166	1,823,450	4,670,170	3,172,650	9,666,270	1,450 01	1,450 01
April	112	602,250	3,692,800	2,182,830	6,477,880	971 69	971 69
May	226	1,406,700	11,225,340	2,565,950	15,197,950	2,279 71	2,279 71
June	52	241,200	2,643,950	826,650	3,711,800	556 78	556 78

TABLE No. 10—Continued.

Months and Years.	No. Cars Shipped.	Size of Crushed Rock in Pounds.			Total Weights in Pounds.	Value of Crushed Rock.			Total Value.
		2½-Inch.	1½-Inch.	¾-Inch.		25c. Ton.	30c. Ton.	35c. Ton.	
1902—July	202	232,000	10,872,560	3,437,750	14,542,310	---	\$2,181 37	---	\$2,181 37
August	203	188,800	13,336,150	1,892,830	15,417,780	---	2,312 71	---	2,312 71
September	158	112,900	11,612,100	532,400	12,257,400	---	1,838 62	---	1,838 62
October	143	719,800	8,754,300	1,043,250	10,517,350	---	1,577 63	---	1,577 63
November	160	1,824,500	6,760,000	1,805,050	10,389,550	---	1,558 44	---	1,558 44
December	167	1,106,100	8,323,850	1,588,700	11,018,650	---	1,652 80	---	1,652 80
1903—January	98	100,000	5,466,310	778,050	6,344,360	---	951 71	---	951 71
February	154	618,000	8,039,500	1,127,650	9,845,150	---	1,476 81	---	1,476 81
March	178	2,204,950	7,566,200	2,077,600	11,848,750	---	1,777 40	---	1,777 40
April	222	647,050	11,123,900	2,374,400	14,145,350	---	2,121 82	---	2,121 82
May	178	2,438,850	5,944,100	3,158,870	11,591,820	---	1,738 82	---	1,738 82
June	130	1,065,650	4,619,550	2,449,400	8,134,600	---	1,220 20	---	1,220 20
1903—July	198	3,497,450	5,277,950	3,366,350	12,141,750	---	1,821 33	---	1,821 33
August	198	3,366,650	4,461,740	3,799,350	11,627,740	---	1,744 20	---	1,744 20
September	130	1,842,350	3,412,250	2,500,850	7,755,450	---	1,163 36	---	1,163 36
October	161	1,634,050	4,633,750	3,094,600	9,362,400	---	1,404 43	---	1,404 43
November	101	109,050	3,505,550	2,102,050	5,716,650	---	857 55	---	857 55
December	112	68,000	3,792,300	2,457,250	6,317,550	---	947 65	---	947 65
1904—January	168	2,937,300	2,962,150	3,482,300	9,381,750	---	1,407 32	---	1,407 32
February	155	2,935,600	2,680,500	2,814,550	8,430,650	---	1,261 61	---	1,261 61
March	200	2,558,850	4,635,050	3,745,550	10,939,450	---	934 92	\$423 69	1,758 61
April	274	4,187,200	5,538,820	4,702,730	14,428,750	---	---	2,525 05	2,525 05
May	226	3,740,850	4,978,250	3,511,740	12,230,840	---	---	2,140 42	2,140 42
June	212	3,952,350	4,511,490	3,332,900	11,796,740	---	---	2,064 43	2,064 43
Totals	15,260	260,248,355	389,003,185	227,377,200	876,628,740	\$16,249 82	\$105,521 74	\$7,553 59	\$129,325 15

N. B.—No rock was crushed during the months of July, August, September, and October, 1901, owing to the rock-crusher having been destroyed by fire.

TABLE No. 11.

*Destination of Road Metal Crushed and Shipped from June 10, 1896,
to June 30, 1904.*

Cars.	Destination.	Weight— Pounds.
74	Armstrong Switch	3,949,450
3	Acampo	168,700
5	Alta	276,750
68	Auburn	3,908,650
7	Ben Ali	348,300
5	Brighton	277,750
9	Buhach Switch	506,950
2	Bruceville	99,450
20	Bakersfield	1,127,100
10	Byron	555,850
7	Bogue's Spur	390,350
2	Ceres	120,300
7	Colfax	402,750
2	Cornwall	118,150
6	Dutch Flat	336,900
29	Dixon	1,682,300
4	Dredge	240,000
64	Elk Grove	3,566,800
—	Forest Grove (wagon load)	16,000
33	Florin	1,879,500
21½	Folsom	1,261,850
1	Galt	59,300
15	Guthrie	833,650
16	Grass Valley	969,400
734	Homestead	38,615,970
10	Knight's Landing	494,750
19	Lodi	1,065,550
1	Lomo	52,600
1	Lathrop	56,950
1,168	Marysville	65,143,910
65	Modesto	3,687,100
5	McConnells	276,600
3	Mills	150,000
14	Madera	823,550
25	Martinez	1,423,050
2	Marcuse	123,200
16	Napa	880,850
1	Newcastle	60,150
4	Oswald	217,850
2	Orchard Switch	110,000
8	Ostroms	445,250
34	Placerville	1,900,350
10	Perkins	558,880
5	Port Costa	275,450
2	Roseville	102,350
2	Reed's Station	115,250
5,582	Sacramento	313,703,170
4,175	Stockton	231,976,540
2,698	Southern Pacific Co.	176,950,150
1	Suisun	48,750
77	State Prison at Folsom	3,874,000
3	State Prison at Folsom (fish ladder)	160,000
3	Tudor	171,300
5	Turlock	259,750
1	Towles	55,350
8	Vallejo	445,750
2	Washington	107,000
1	Wheatland	60,300
59½	Woodland	3,409,180
2	West Spur	95,300
101	Yuba City	5,636,390
15,260	Totals	876,628,740

EXPERT'S REPORT.

STATE PRISON AT FOLSOM, July 1, 1904.

I hereby certify that I have compared the biennial report of Brainard F. Smith, Clerk of Folsom Prison, for the fiscal years ending June 30, 1903, and June 30, 1904, with the several accounts as kept in the official books of the Prison, and I find it to be a true and correct statement from the said books. I also certify that the Clerk has kept the accounts of Folsom Prison for said fiscal years in such a manner as to exhibit clearly all its financial transactions, and when any sum of money was paid to the Warden the same has been properly entered on the books by the Clerk.

I also certify that I find authorizations, duly and properly signed by a majority of the State Board of Prison Directors, for all disbursements included in said report for the fiscal years ending June 30, 1903, and June 30, 1904, and that the Warden has required vouchers for all moneys by him expended during said fiscal years, and safely kept the same on file in his office at the Prison.

LESTER HERRICK,
Expert Accountant for the State Board
of Prison Directors.

GENERAL OVERSEER'S REPORT.

STATE PRISON AT FOLSOM, July 1, 1904.

To HON. ARCHIBALD YELL, Warden State Prison at Folsom, California:

SIR: I have the honor to submit herewith my biennial report, in tabular form, for the fifty-fourth and fifty-fifth fiscal years, commencing July 1, 1902, and ending June 30, 1904.

J. G. McDONOUGH,
General Overseer.

TABLE No. 1—Prison Account, July 1, 1881, to June 30, 1904.

	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	Totals
Received and Discharged.																									
By commitment.....	96	85	131	217	230	225	150	152	241	265	197	237	210	263	326	338	274	297	173	188	153	219	226	345	5,238
Returned witnesses.....	2	1	9	4	6	2	4	2	5	6	7	7	8	8	7	12	12	4	29	2	2	21	2	42	204
Pardons revoked.....				1																					1
Parole revoked.....	2	5		3	1	3	3	3	3	3	2	6	3	2			2	1		2					49
Escapes recaptured.....																									12
Returned from asylum.....																									1
Received U. S. prisoners.....																									54
By order of court.....																									27
By transfer from San Quentin.....	253	60		2	2	1	1	7	11	51	1	4	3	4		3	4			1	1	1	1	1	460
Returned with additional commitment.....																									6
Resentenced and returned.....																									5
Returned on writ.....																									2
Total received.....	353	151	143	276	242	235	159	166	262	328	211	259	241	277	346	358	295	304	206	194	162	247	238	406	6,059
Paroled.....																									48
Per act.....	36	114	93	75	48	42	69	80	23	42	41	52	56	68	53	75	123	138	153	179	183	160	124	112	2,139
Pardoned.....	1	3	11	11	11	1	8	4	9	1	7	3	2	1	3	2									1
Escaped.....	6	4	4	6	4	2	2	2	2	3	5	2	2		3	2									80
Suicided.....	1																								79
As witness.....	2	2	9	4	6	2	1	2	5	6	7	8	8	8	7	12	12	4	29	2	2	21	2	43	207
By commutation.....																									87
For new trial.....	1	1	8	3	22	16	13	1	1	2	1	6	1	2	4	5	1	2	6	1	2	1	1	1	57
Died and killed.....	3	6	13	7	7	7	15	7	6	3	15	12	9	6	9	7	14	12	7	14	10	8	11	8	209
Per act and restored.....																									1,755
By order of court.....	3	2						88	83	93	97	133	176	140	138	153	133	108	62	26	16	9	35	4	82
Conditionally pardoned.....																									32
Pardoned by the President.....	1		1	1	3																				8
By writ of probable cause.....																									2
By writ of habeas corpus.....																									2
Killed by fellow convict.....																									15
Transferred to San Quentin.....																									4
U. S. prisoners discharged.....																									256
By certificate of probable cause.....																									4
Killed while attempting to escape.....	1	1																							45
For trial on additional charge.....																									3
For trial on new charge.....																									1
To insane asylum.....																									1
Credits restored.....																									7
For resentence.....																									5
Executed.....																									16
Total discharged.....	56	139	144	118	147	152	198	350	134	212	184	226	282	237	230	293	283	293	279	228	244	197	307	1	5,152

TABLE No. 2.
Recapitulation of Received and Discharged Prisoners.

Months.	Total	16	16	11	13	21	17	19	25	21	9	16	29	31	14	25	28	34	24	18	16	26	23	504
	Died Att. to Escape														1								1	
	Suicided																							
	Credits Restored									1			1							1			4	
	Killed by Accident							1					1										2	
	For Trial on Add. Charge								1							3				1				5
	Died	1		1	1				1	1			1	1	1	1								17
	Paroled				1	1				3	2	1				5	2			2				16
	Per Act	10	15	5	7	11	17	12	19	10	5	6	9	16	7	9	15	4	9	4	13	10	7	236
	Escaped		1	2	1			2					13											21
	Executed			1															1					3
	Pardoned						1								2		1							4
	Commuted															3								4
	New Trial				1																			
	Out as Witness			1				1							1	9								45
	On Writ																		1					2
	By Order of Court								2			1				4						1	1	9
	Dis. by Order of Court																							
	To San Quentin								1				1	1				2			2			7
	To Insane Asylum	1					2				2									2				7
	U. S. Prisoners					1																1		2
	Per Act and Restored	4	1	2	2	2	10	5	9	11	4	15	12	5	7	31	9	1	4	7	10	11	9	117
	Total	13	13	20	21	23	31	24	13	19	24	15	15	12	20	31	71	55	49	41	47	37	644	
	Resentenced and Ret'd.																							
	Escapes Returned				1			2			1	2												
	From San Quentin																							
	From Asylum										1							1						
	U. S. Prisoners						2											1						
	By Order of Court							1							3									
	Witness Returned				1												1							
Ret'd with Add. Com't.								1									1				14	2		
Returned on Writ																								
By Commitments	13	13	19	21	23	15	28	12	19	22	15	13	10	17	22	53	46	40	30	34		571		
	1902—July																							
	August																							
	September																							
	October																							
	November																							
	December																							
	1903—January																							
	February																							
	March																							
	April																							
	May																							
	June																							
	July																							
	August																							
	September																							
	October																							
	November																							
	December																							
	1904—January																							
	February																							
	March																							
	April																							
	May																							
	June																							
	Total																							

TABLE No. 3.

Recapitulation of Population.

Months.	Population for Month.	Daily Average.	Summary.
1902—July	23,781	767.12+	
August	23,649	762.87+	
September	22,892	763.06+	
October	24,110	777.74+	
November	23,379	779.30	
December	24,307	784.09+	
Gross first half fiscal year	142,118	4634.18	772.36+
1903—January	24,269	782.87+	
February	22,086	788.78+	
March	24,739	798.03+	
April	23,836	794.53+	
May	24,674	795.93+	
June	24,121	804.03+	
Gross second half fiscal year	143,725	4764.77	794.02+
1903—July	24,853	801.70+	
August	24,456	788.90+	
September	23,352	778.40	
October	23,934	772.06+	
November	22,987	766.23+	
December	23,487	757.64+	
Gross first half fiscal year	143,069	4664.93	777.48+
1904—January	24,084	776.90+	
February	23,770	819.65+	
March	26,624	858.83+	
April	26,199	873.30	
May	27,565	889.19+	
June	27,022	900.73+	
Gross second half fiscal year	155,264	5118.60	853.10

TABLE No. 4.

Occupation of Prisoners When Received—July 1, 1902, to June 30, 1903.

Occupation.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.	Occupation.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.
Accountant.....	1	1	Journalist.....		3
Barber.....	4	24	Laborer.....	76	269
Baker.....	5	15	Laundryman.....	1	11
Bartender.....		1	Lawyer.....		1
Basketmaker.....		1	Logger.....		1
Blacksmith.....	3	12	Machinist.....	3	13
Blacksmith's helper.....		2	Merchant.....		2
Boilermaker.....		4	Millhand.....		3
Bookbinder.....	1	1	Miner.....	6	13
Bookkeeper.....		5	Musician.....	2	4
Brakeman.....	1	2	Nailmaker.....		1
Boxmaker.....		1	Nurse.....	1	3
Butcher.....	4	7	Orchardist.....		1
Butler.....	1	2	Painter.....	7	21
Cabinetmaker.....		3	Paperhanger.....		1
Candy-maker.....		2	Pastrycook.....	1	1
Carpenter.....	8	18	Peddler.....		1
Cigarmaker.....	1	2	Porter.....	2	5
Cigarette-maker.....		1	Plumber.....		4
Clerk.....	4	13	Printer.....	2	3
Cob-winder.....		1	Rancher.....	2	5
Confectioner.....	1	2	Rigger.....		1
Correspondent.....	1	1	Railroadman.....		4
Cooper.....		2	Sailor.....	8	26
Cook.....	12	50	Salesman.....	1	2
Dairyman.....		1	Saloonkeeper.....		1
Dentist.....		1	Shoemaker.....	3	12
Dishwasher.....	1	1	Stenographer.....		2
Druggist.....		2	Stonecutter.....	1	2
Dyer.....		1	Stonemason.....		1
Electrician.....	2	5	Tailor.....	3	13
Electrotyper.....		1	Tanner.....		1
Engineer.....	3	12	Teamster.....	11	29
Farmer.....	4	19	Telegrapher.....	2	3
Fireman.....	9	20	Tinner.....	1	5
Florist.....		1	Tool-sharpener.....		1
Gardener.....	1	4	Trunkmaker.....		1
Glassblower.....		2	Upholsterer.....	1	5
Harnessmaker.....		2	Vaquero.....	2	4
Hostler.....	10	26	Waiter.....	14	31
Horseshoer.....	1	4	Watchmaker.....		1
Horsetrainer.....		1	Weaver.....		3
Ironmolder.....		3	No occupation.....		13
Jeweler.....		1			
Jockey.....		1	Totals.....	228	808

Summary, in Percentage.

Mechanics.....	30.94%
Business.....	2.72%
Professions.....	7.67%
Agriculturists.....	3.96%
Laborers.....	33.29%
None.....	1.61%
Miscellaneous.....	19.81%
Total.....	100.00%

TABLE No. 4—Continued.

Occupation of Prisoners When Received—July 1, 1903, to June 30, 1904.

Occupation.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.	Occupation.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.
Accountant	2	3	Laundryman	1	8
Baker	8	26	Lawyer	1	1
Barber	12	32	Machinist	10	16
Bartender	4	4	Merchant	2	3
Basketmaker	1	1	Miller	1	1
Bellboy	1	1	Millhand	2	4
Blacksmith	3	13	Miner	8	16
Boilermaker	2	3	Musician	1	2
Bookkeeper	5	9	Nurse	4	7
Bootblack	1	1	Orchardist	1	1
Boxmaker	1	1	Painter	8	20
Brakeman	1	3	Pastry cook	1	1
Butcher	4	8	Plumber	3	5
Butler	3	3	Porter	1	4
Cabinetmaker	1	2	Printer	1	8
Candymaker	1	1	Railroadman	6	10
Carpenter	10	21	Rancher	1	4
Cigarmaker	3	5	Sailor	6	25
Clerk	17	29	Salesman	1	2
Confectioner	1	1	Saloonkeeper	1	2
Cook	31	68	Shoemaker	3	13
Cooper	1	1	Shoecutter	1	1
Copyist	1	1	Ship-calker	1	1
Cowboy	1	1	Stenographer	2	2
Dairyman	1	1	Tailor	4	13
Dentist	1	2	Tanner	1	1
Druggist	2	2	Teamster	16	32
Electrician	4	5	Tinner	1	3
Engineer	4	12	Telegraph operator	1	3
Farmer	7	26	Tool-sharpener	1	1
Fireman	5	19	Upholsterer	2	5
Gardener	4	7	Vaquero	16	52
Glassblower	1	3	Waiter	1	1
Harnessmaker	2	4	Wagonmaker	1	1
Hostler	7	25	Weaver	1	1
House servant	3	1	Watchmaker	1	1
Horseshoer	4	5	Wood carver	1	2
Ironmolder	3	4	No occupation	1	4
Ironworker	3	3			
Journalist	94	268	Totals	351	907
Laborer					

Summary, in Percentage.

	July 1, 1903, to June 30, 1904.	On Hand, June 30, 1904.
Mechanics	19.46%	16.98%
Business	14.26%	10.92%
Professions	2.27%	1.54%
Agriculturists	1.37%	1.32%
Laborers	40.42%	48.18%
None	22.22%	4.44%
Miscellaneous		20.62%
Totals	100.00%	100.00%

TABLE No. 5.

Number of Prisoners from Each County—July 1, 1902, to June 30, 1903.

County.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.	County.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.
Alameda.....	15	52	Sacramento.....	16	84
Amador.....	1	7	San Benito.....		1
Butte.....	1	8	San Diego.....	3	6
Calaveras.....		3	San Bernardino.....	11	23
Colusa.....	1	4	San Joaquin.....	12	25
Contra Costa.....	6	11	Santa Barbara.....	4	6
Del Norte.....			San Mateo.....	2	4
El Dorado.....	1	7	San Luis Obispo.....	1	5
Fresno.....	17	55	Santa Clara.....	7	17
Glenn.....	1	2	San Francisco.....	23	190
Humboldt.....			Santa Cruz.....	3	7
Inyo.....	1	1	Shasta.....		
Kern.....	1	11	Sierra.....		1
Kings.....	5	6	Siskiyou.....	1	1
Lake.....		1	Stanislaus.....	6	6
Lassen.....		1	Solano.....	3	16
Los Angeles.....	30	87	Sonoma.....	5	17
Madera.....	4	10	Sutter.....	1	8
Marin.....	1	3	Tehama.....	7	12
Mariposa.....		1	Trinity.....		1
Mendocino.....	1	7	Tulare.....	6	13
Merced.....	2	8	Tuolumne.....	1	5
Monterey.....		1	Ventura.....	3	8
Modoc.....			Yolo.....	5	20
Napa.....		1	Yuba.....	12	13
Nevada.....	3	10	Northern District.....	2	5
Orange.....	1	6			
Placer.....	2	13	Totals.....	228	808
Riverside.....					

TABLE No. 5—*Continued.**Number of Prisoners from Each County—July 1, 1903, to June 30, 1904.*

County.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.	County.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.
Alameda.....	26	58	Riverside.....	5	4
Alpine.....			Sacramento.....	19	72
Amador.....	1	5	San Benito.....		1
Butte.....	1	3	San Bernardino.....	14	30
Calaveras.....	2	5	San Diego.....	1	7
Colusa.....		2	San Joaquin.....	24	44
Contra Costa.....	5	11	San Mateo.....	4	8
Del Norte.....	1	1	San Luis Obispo.....	3	6
El Dorado.....	4	9	San Francisco.....	39	189
Fresno.....	10	47	Santa Barbara.....	4	9
Glenn.....	2	3	Santa Clara.....	3	18
Humboldt.....	1	1	Santa Cruz.....	5	11
Inyo.....			Shasta.....	2	2
Kern.....	11	18	Sierra.....	1	2
Kings.....	2	5	Siskiyou.....	2	3
Lake.....		1	Stanislaus.....	1	1
Lassen.....	1	2	Solano.....	8	19
Los Angeles.....	51	126	Sonoma.....	7	19
Madera.....		5	Sutter.....	1	6
Marin.....	7	10	Tehama.....	2	12
Mariposa.....		1	Trinity.....	1	2
Mendocino.....	5	11	Tulare.....	6	17
Merced.....		5	Tuolumne.....		4
Monterey.....	3	4	Ventura.....	5	8
Modoc.....	2	1	Yolo.....	6	16
Mono.....			Yuba.....	8	23
Napa.....	1	2	Northern District.....	1	5
Nevada.....	3	9	Southern District.....	4	4
Orange.....	3	7			
Placer.....	3	13	Totals.....	351	907
Plumas.....					

TABLE No. 6.

Nativity and Race of Prisoners—July 1, 1902, to June 30, 1903.

Nativity.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.	Nativity.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.
<i>United States.</i>			<i>Foreign.</i>		
Alabama		2	Africa		1
Arizona	1	4	Austria	2	6
Arkansas	1	2	Australia		3
California	73	240	Cuba	2	2
Colorado	3	5	Canada	4	9
Connecticut	1	4	Central America		5
District of Columbia	1	3	China	1	17
Georgia		2	Denmark	1	4
Illinois	10	36	England	5	24
Indiana	3	14	Finland		1
Iowa	2	13	France	2	9
Kansas	2	6	Germany	7	30
Kentucky	5	23	Greece		2
Louisiana		1	Hawaiian Islands		1
Maine		5	Holland		1
Maryland	3	5	Ireland	4	23
Massachusetts	6	15	Italy	1	5
Michigan	4	16	India		1
Minnesota	3	4	Japan	4	8
Missouri	3	22	Malta		1
Montana	1	3	Mexico	8	26
Nebraska	1	2	Norway		2
Nevada	1	4	Portugal	1	3
New Hampshire		1	Russia		4
New Jersey	1	2	Scotland	2	6
New York	13	45	South America	1	1
North Carolina	2	3	Sweden	2	8
Ohio	9	21	Switzerland	1	1
Oregon	2	8	West Indies		2
Pennsylvania	10	28			
Rhode Island		2	Totals	228	808
South Carolina	1	3			
Tennessee	4	10	Native born	180	602
Texas	9	25	Foreign born	48	206
Vermont		4			
Virginia	2	9	<i>Race.</i>		
Washington	1	2	Caucasian	196	678
West Virginia		1	Mongolian	6	20
Wisconsin	2	7	Negro	19	69
			Indian	7	41
			Totals	228	808

TABLE No. 6—Continued.

Nativity and Race of Prisoners—July 1, 1903, to June 30, 1904.

Nativity.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.	Nativity.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.
<i>United States.</i>			<i>Foreign.</i>		
Alabama.....	2	4	Africa.....		1
Alaska.....	2	2	Australia.....	3	5
Arizona.....		2	Austria.....	2	5
California.....	86	249	British Columbia.....	1	1
Colorado.....	3	7	Belgium.....	1	1
Connecticut.....	3	6	Canada.....	5	10
Georgia.....	2	2	China.....	3	13
Illinois.....	13	39	Chile.....		4
Indiana.....	9	17	Cuba.....		2
Idaho.....	1	1	Denmark.....	3	6
Iowa.....	7	15	England.....	10	29
Kansas.....	4	7	Finland.....		1
Kentucky.....	6	25	France.....	4	12
Louisiana.....	3	3	Germany.....	13	37
Maine.....		1	Greece.....	1	1
Maryland.....		5	Hawaiian Islands.....		1
Massachusetts.....	9	23	Holland.....	1	1
Michigan.....	1	11	India.....		1
Minnesota.....	1	7	Ireland.....	6	21
Missouri.....	6	22	Italy.....	6	9
Montana.....		3	Japan.....	4	8
Nebraska.....	1	3	Mexico.....	24	36
Nevada.....	2	3	Norway.....	2	4
New Hampshire.....		1	Portugal.....	2	5
New Jersey.....	4	4	Russia.....	2	3
New York.....	29	62	Scotland.....	2	8
North Carolina.....	2	5	South America.....		3
New Mexico.....	3	4	Sweden.....		5
Ohio.....	11	24	Switzerland.....	1	2
Oregon.....	4	9	Wales.....	3	4
Pennsylvania.....	16	34	West Indies.....	1	3
Rhode Island.....		2			
South Carolina.....	3	5	Totals.....	351	907
Tennessee.....	2	7			
Texas.....	4	19	Native born.....	251	664
Utah.....	1	1	Foreign born.....	100	243
Vermont.....	1	5			
Virginia.....	2	10	Totals.....	351	907
Washington.....	2	2			
West Virginia.....	1	2	<i>Race.</i>		
Washington, D. C.....	1	2	Caucasian.....	328	802
Wisconsin.....	4	10	Mongolian.....	10	28
			Negro.....	11	62
			Indian.....	2	15
			Totals.....	351	907

TABLE No. 7.

Classification of Crime—July 1, 1902, to June 30, 1903.

Crime.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.	Crime.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.
Arson.....		4	Embezzlement.....	3	6
Arson, first degree.....		2	Felony.....		7
Assault, deadly weapon.....	14	20	Felony, and prior.....	1	1
Assault, deadly weapon, and prior.....		2	Forgery.....	6	19
Assault to murder.....	3	18	Forgery, and prior.....		3
Assault to murder, and prior.....		3	Grand larceny.....	50	96
Assault to rape.....	2	18	Grand larceny, and prior.....		11
Assault to rape, and prior.....		1	Having in possession counterfeit coin.....		1
Assault to rob.....		8	Having in possession molds counterfeit coin.....	1	1
Assault to rob, and prior.....		1	Incest.....	1	1
Attempt to commit bur- glary.....		1	Injuring public jail.....		1
Attempted burglary, first degree.....	3	4	Jail breaking.....		1
Attempted burglary, first degree, and prior.....		1	Maliciously burning house.....		1
Attempted burglary, second degree.....		2	Manslaughter.....	2	17
Attempted crime against nature.....	2	5	Manslaughter, and prior.....		1
Attempted grand larceny.....	1	1	Murder.....	1	3
Attempted train wrecking.....		1	Murder, first degree.....	9	66
Attempted to pass fictitious check.....		2	Murder, second degree.....	2	34
Breaking into U. S. post- office.....		1	Mayhem.....		1
Bringing stolen property into State from abroad.....		1	Obtaining money, false pretense.....		2
Burglary.....	15	29	Passing and uttering fic- titious check.....		5
Bigamy.....	1		Perjury.....	1	5
Burglary, and prior.....		1	Petit larceny, and prior.....	3	8
Burglary, first degree.....	29	104	Rape.....	4	24
Burglary, first degree, and prior.....	4	22	Rape, and prior.....		1
Burglary, second degree.....	53	105	Receiving stolen property.....		1
Burglary, second degree, and prior.....		11	Robbery.....	12	93
Crime against nature.....	2	14	Robbery, and prior.....	1	12
Crime against nature, and prior.....		1	Robbing U. S. mail.....		1
			Bringing morphine into State Prison.....	1	1
			Conspiring against the United States.....	1	1
			Totals.....	228	808

TABLE No. 7—Continued.

Classification of Crime—July 1, 1903, to June 30, 1904.

Crime.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.	Crime.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.
Arson		3	Escaping from State Prison	1	1
Arson, first degree		2	Embezzlement	9	13
Assault with deadly weapon	10	17	Extortion	3	3
Assault with deadly weapon and prior		2	Felony	3	9
Assault to murder	6	21	Forgery	17	33
Assault to murder and prior		3	Forgery, and prior	2	4
Assault to rape	2	13	Forgery U. S. postoffice money order	1	1
Assault to rape, and prior		1	Grand larceny	73	127
Assault to rob	4	10	Grand larceny, and prior	5	17
Assault to rob, and prior	1	2	Having possession molds for counterfeiting coin		1
Attempt to commit bur- glary, first degree	2	7	Incest	1	2
Attempt to commit bur- glary, second degree	3	3	Jail breaking		1
Attempt to commit crime against nature	2	5	Maliciously burning house		1
Attempt to commit grand larceny	2	3	Manslaughter	4	15
Attempted train wrecking		1	Manslaughter, and prior		1
Attempt to pass fictitious check		1	Murder		3
Breaking into U. S. post- office		1	Murder, first degree	9	64
Bringing opium into State Prison	4	5	Murder, second degree	8	36
Burglary	6	19	Mayhem		1
Burglary, and prior		2	Obtaining money and prop- erty, false pretense	2	4
Burglary, first degree	58	131	Passing fictitious check	4	7
Burglary, first degree and prior	1	18	Perjury		3
Burglary, second degree	63	118	Petit larceny, and prior	7	10
Burglary and assault to murder		2	Rape	8	28
Burglary, second degree, and prior	5	12	Rape, and prior		1
Counterfeiting	1	1	Robbery	17	86
Crime against nature		12	Robbery, and prior	2	13
Child stealing	1	1	Robbing U. S. mails		1
Conspiring to commit an offense against U. S.		1	Stealing from U. S. post- office	1	1
			Sending threatening letter, intent to extort	1	1
			Uttering false naturaliza- tion certificate	1	1
			Violat'n U.S. pension laws	1	1
			Totals	351	907

TABLE No. 8.

Age of Prisoners, June 30, 1903.

Age—Years.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.	Age—Years.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.
Sixteen	1	1	Fifty	2	4
Seventeen	4	3	Fifty-one		8
Eighteen	7	8	Fifty-two	3	8
Nineteen	10	17	Fifty-three	3	12
Twenty	11	19	Fifty-four	2	11
Twenty-one	6	23	Fifty-five		8
Twenty-two	9	19	Fifty-six		4
Twenty-three	11	29	Fifty-seven		6
Twenty-four	13	28	Fifty-eight	1	4
Twenty-five	10	33	Fifty-nine	1	4
Twenty-six	18	29	Sixty	2	4
Twenty-seven	12	39	Sixty-one		4
Twenty-eight	9	33	Sixty-three		6
Twenty-nine	10	28	Sixty-four		1
Thirty	7	30	Sixty-six		1
Thirty-one	11	37	Seventy		2
Thirty-two	5	26	Seventy-one		1
Thirty-three	2	23	Seventy-three	1	2
Thirty-four	8	31	Seventy-five		1
Thirty-five	5	29	Seventy-eight		1
Thirty-six	2	18	Eighty-three		1
Thirty-seven	4	23			
Thirty-eight	4	16	Totals	228	808
Thirty-nine	5	26			
Forty	7	26	<i>Summary.</i>		
Forty-one	1	11	Twenty and under	33	48
Forty-two	2	17	Twenty to thirty	105	291
Forty-three	4	18	Thirty to forty	53	255
Forty-four	2	18	Forty to fifty	24	123
Forty-five	6	12	Fifty to sixty	12	71
Forty-six	3	11	Sixty to seventy		14
Forty-seven	2	6	Seventy and over	1	6
Forty-eight	1	12			
Forty-nine	1	14	Totals	228	808

TABLE No. 8—Continued.
Age of Prisoners, June 30, 1904.

Age—Years.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.	Age—Years.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.
Sixteen	2	3	Fifty	1	10
Seventeen	2	2	Fifty-two	1	9
Eighteen	16	16	Fifty-three		7
Nineteen	12	16	Fifty-four	3	15
Twenty	24	33	Fifty-five		12
Twenty-one	16	28	Fifty-six	2	6
Twenty-two	26	38	Fifty-seven		4
Twenty-three	17	31	Fifty-eight		3
Twenty-four	19	41	Fifty-nine		6
Twenty-five	15	38	Sixty	1	5
Twenty-six	22	44	Sixty-one	2	3
Twenty-seven	18	31	Sixty-two		4
Twenty-eight	16	45	Sixty-four	2	5
Twenty-nine	8	25	Sixty-seven	1	2
Thirty	11	27	Sixty-eight		1
Thirty-one	11	29	Seventy		1
Thirty-two	11	35	Seventy-one		1
Thirty-three	15	36	Seventy-two		1
Thirty-four	8	23	Seventy-four		1
Thirty-five	13	31	Seventy-nine		1
Thirty-six	6	26	Eighty-three		1
Thirty-seven	1	15			
Thirty-eight	6	21	Totals	351	907
Thirty-nine	3	24	Summary.		
Forty	12	30	Twenty and under	56	70
Forty-one	5	22	Twenty-one to thirty	168	348
Forty-two	6	12	Thirty-one to forty	86	270
Forty-three	2	17	Forty-one to fifty	29	131
Forty-four	5	14	Fifty-one to sixty	7	67
Forty-five	3	20	Sixty-one to seventy	5	16
Forty-six	2	11	Seventy-one and over		5
Forty-seven	2	10			
Forty-eight	1	5	Totals	351	907
Forty-nine	2	10			

TABLE No. 9.

Terms of Imprisonment—July 1, 1902, to June 30, 1903.

Years.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.	Years.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.
Three-quarters	1	1	Thirteen and one half		1
One	39	32	Fourteen	5	23
One and one quarter	1	1	Fifteen	5	47
One and one half	5	7	Sixteen	1	3
One and eleven months	1	1	Seventeen	1	3
Two	39	52	Eighteen		3
Two and one quarter		1	Twenty	2	49
Two and one half	1	10	Twenty-two		1
Three	36	63	Twenty-four		1
Three and one half		6	Twenty-five		15
Four	16	33	Thirty	2	15
Four and one half		3	Thirty-one		
Four and three quarters		1	Thirty-two		1
Five	28	94	Thirty-three		1
Five and seven months		1	Thirty-five		5
Six	4	22	Thirty-six		1
Seven	8	34	Thirty-seven and one half		1
Seven and one half		5	Forty		7
Eight	4	23	Forty-two		1
Nine	1	5	Forty-five		3
Ten	12	85	Fifty		1
Ten and seven months	1	1	Sixty		1
Ten and eight months, fifteen days		1	Ninety		1
Eleven	1	3	Life imprisonment	6	104
Twelve	2	21	Death sentence	4	3
Thirteen	2	3	Total	228	808

TABLE No. 9—Continued.

Terms of Imprisonment—July 1, 1903, to June 30, 1904.

Years.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.	Years.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.
Six months	2		Thirteen	1	5
One	70	61	Thirteen and six months		1
One and one day	1		Fourteen	3	21
One and one quarter	3	3	Fifteen	5	44
One and one half	7	8	Sixteen		3
Two	67	38	Seventeen	1	4
Two and one half	6	8	Eighteen		3
Three	34	73	Twenty	3	46
Three and one half	1	6	Twenty-two		1
Four	20	46	Twenty-four		1
Four and one half		3	Twenty-five	4	16
Four and three quarters		1	Thirty	1	12
Five	39	110	Thirty-two		1
Five and seven months		1	Thirty-five	2	7
Six	8	24	Thirty-six	1	2
Seven	9	33	Forty	2	8
Seven and one half		2	Forty-five		1
Eight	11	34	Fifty		1
Nine	3	6	Sixty		1
Nine and eleven months	1	1	Ninety	1	2
Ten	27	91	Ninety-nine	1	1
Ten and seven months		1	Life	9	99
Ten and eight mos. 15 days		1	Death	4	4
Eleven		3			
Twelve	4	19	Totals	351	907

TABLE No. 10.—*Term.*

PRISONERS SERVING.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.
First term	175	559	261	610
Second term	33	149	61	193
Third term	13	68	20	74
Fourth term	4	19	6	17
Fifth term	2	5	2	5
Sixth term	1	3	1	2
Seventh term		2		2
Eighth term		1		2
Ninth term		2		1
Tenth term				1
Totals	228	808	351	907

TABLE No. 11.—*Educational.*

SYSTEM.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.
College	1	6		4
Private	15	48	22	57
Public and Private	9	49	39	84
Self	12	19	4	20
Public	162	585	269	664
None	29	101	17	78
Totals	228	808	351	907
DEGREE.				
Read and write	199	709	331	826
Read and cannot write	2	10	2	10
Neither read nor write	27	89	18	71
Totals	228	808	351	907

TABLE No. 12.—*Religion.*

BELIEF.	July 1, 1902, to June 30, 1903.	On Hand June 30, 1903.	July 1, 1903, to June 30, 1904.	On Hand June 30, 1904.
Catholic	97	338	177	409
Protestant	108	366	158	408
Jew		5	4	8
Pagan	7	27	6	24
Atheist		1		1
Irreligious	16	71	6	57
Totals	228	808	351	907

TABLE No. 13—CLOTHING REPORT.

From July 1, 1903, to June 30, 1904.

Months.	Issues.			Manufactures.						
	Citizens.			S. P. Coats	Hickory Shirts	Undershirts	Drawers	S. P. Shirts	S. P. Pants	Shoes
	Coats	Vests	Pants							
1902—July	14	14	14	135	102	19	19	139	161	123
August	16	16	16	112	70	21	16	106	176	121
September	6	6	6	200	57	17	16	162	195	149
October	10	10	10	158	39	1,414	1,421	148	157	100
November	13	13	13	163	48	70	68	141	154	100
December	20	20	20	179	80	65	65	175	186	115
1903—January	16	16	16	160	61	50	50	126	172	115
February	17	17	17	172	47	78	76	128	189	125
March	22	22	22	149	55	70	68	131	150	148
April	16	16	16	114	41	41	41	99	131	102
May	8	8	8	132	35	10	10	106	125	98
June	16	16	16	166	25	15	15	164	169	133
July	13	13	13	130	23	14	14	116	125	96
August	29	29	29	121	39	29	29	130	180	106
September	11	11	11	142	30	11	11	125	130	129
October	19	19	19	123	21	1,434	1,434	117	104	104
November	16	16	16	122	22	42	42	119	104	91
December	24	24	24	166	39	68	68	158	170	123
1904—January	4	4	4	195	24	118	118	204	210	123
February	13	13	13	199	24	122	122	194	191	147
March	15	15	15	212	35	107	107	213	213	149
April	25	25	25	172	42	113	113	182	197	119
May	21	21	21	152	33	59	59	141	157	134
June	19	19	19	182	31	18	18	185	162	151
Totals	383	383	383	3,500	1,023	4,005	4,013	3,515	3,872	2,901
				464	1,036	4,011	4,037	464		

PHYSICIAN'S REPORT.

STATE PRISON AT FOLSOM, June 30, 1904.

To HON. ARCHIBALD YELL, Warden State Prison at Folsom, California:

SIR: I herewith present report of prisoners treated by the Resident Physician of this prison for the two fiscal years ending June 30, 1903, and June 30, 1904, showing all transactions in the Medical Department.

I would recommend that an X-ray apparatus be furnished, not only for use on the convicts, but it may be the means of saving the life of an officer or guard who is liable to be shot at any time. I believe an apparatus sufficient for such use can be furnished at a price not to exceed \$300.

Respectfully,

CHAS. F. GLADDING,
Resident Physician.

TABLE No. 1.

Number of Cases Treated during the Fiscal Year ending June 30, 1903, Including Office Calls and Cases Treated in Hospital; Number of Those Excused from Daily Labor on Account of Illness; and Number of Deaths.

	1902.						1903.						Total
	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	
<i>Medical Cases.</i>													
Asthma		1	2	2	1	2	2	5	6	5	3	4	33
Biliousness	37	31	33	35	25	45	35	38	60	119	68	68	594
Bronchitis	37	28	70	65	63	80	104	120	210	500	275	155	1,707
Catarrh, nasal	4	4	5	6	3	20	15	15	37	36	14	15	174
" genito-urinary		2	3	4	4	5	3	7	11	16	6	4	65
Constipation	28	18	25	25	16	10	15	24	43	82	57	70	413
Conjunctivitis	30	29	6	16	12	12	16	19	26	30	25	26	247
Colic	14	7	5	22	21	18	19	28	46	44	45	65	334
Cephalalgia	10	12	15	16	10	10	20	28	56	53	38	46	314
Diarrhœa	28	11	45	42	25	17	12	14	58	51	63	69	435
Dysuria	5	3	8	6	2	12	12	10	23	20	16	22	139
Gonorrhœa	2			3	1	2	1	2	4	9	8	9	41
Indigestion	16	9	27	22	15	24	20	30	40	58	35	41	337
Malaria	61	57	55	78	33	56	57	61	199	114	152	264	1,187
Neuralgia	16	7	18	8	7	4	11	18	27	30	29	28	203
Otalgia	7	4	14	4	3	3	6	6	12	13	10	11	93
Odontalgia	19	13	27	18	14	20	23	18	20	21	27	28	248
Phthisis	3	3	3	3	3	3	3	3	4	3	1	1	33
Rheumatism	22	14	19	18	16	20	19	28	29	44	31	39	299
Skin diseases	1	1	3	1	1	1	1	1	2	2	1	1	16
Unclassified	15	13	12	10	6	11	13	17	12	22	30	31	192
Totals	355	267	395	404	281	375	407	492	925	1272	934	997	7,104
<i>Surgical Cases.</i>													
Abscesses and boils	1	11	12	1	5	3	1	7	12	5	1	1	60
Sprains	2				4					9	8		23
Teeth extracted	13	7	18	11	9	17	7	7	8	9	11	10	127
Vaccination		13	21	8	18	19	19		33		17	20	163
Wounds, contused	6		2	1	1	1	3	4	2	4	2	5	31
Wounds, incised	3	5		3		1				2		4	18
Unclassified	2	4	2				2		3	1	2		16
Totals	27	40	55	24	32	41	32	18	58	30	41	40	438
Excused from daily labor	36	25	61	44	23	23	27	42	47	56	98	61	543
Admitted to hospital	2	3	3	4	1	4	3	2	4	3	2	5	36
Died	1		2	1			1		2	2			9

Medical cases treated 7,104

Surgical cases treated 438

Total 7,542

TABLE No. 2.

Number of Cases Treated during the Fiscal Year ending June 30, 1904, Including Office Calls and Cases Treated in Hospital; Number of Those Excused from Daily Labor on Account of Illness; and Number of Deaths.

	1903.						1904.						Total
	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	
<i>Medical Cases.</i>													
Asthma	4	3	5	4	4	4	4	6	5	6	7	4	56
Biliousness	68	73	90	90	55	52	80	59	53	91	122	122	955
Bronchitis	140	173	287	372	258	290	330	700	525	297	116	101	3,589
Catarrh, nasal	16	10	21	15	15	19	24	8	15	28	21	26	218
Catarrh, genito-urinary	11	8	9	4	5	12	12	6	6	11	3	2	89
Constipation	68	61	65	53	55	50	90	79	88	93	68	110	880
Conjunctivitis	28	27	42	21	35	40	40	27	35	47	24	19	385
Colic	49	51	77	52	40	46	57	31	32	64	51	154	704
Cephalalgia	54	60	64	49	44	48	70	94	75	74	105	43	780
Diarrhoea	38	57	60	49	22	33	30	19	17	50	38	225	638
Dysuria	11	12	13	15	14	10	23	8	9	18	23	32	188
Gleet	3	2	4	3	2	3	6	4		11	7	6	51
Gonorrhoea	4	3	1	2		4		1	6	6	7	3	37
Indigestion	63	17	41	43	43	30	48	40	33	48	88	72	566
Malaria	194	275	347	193	213	198	305	612	378	327	606	241	3,889
Neuralgia	26	33	23	16	29	26	50	42	20	61	52	35	413
Otalgia	18	23	12	16	12	9	14	7	9	20	27	14	181
Odontalgia	40	39	27	40	39	34	28	33	20	32	42	32	406
Pneumatism	2												2
Rheumatism	38	40	47	50	29	32	52	52	20	82	67	56	565
Scrofula			20	21	15	12		7					75
Syphilis								7	10	4		8	29
Tuberculosis						2	1	2					5
Unclassified	34	30	42	31	30	21	38	18	20	39	61	74	438
Totals	909	997	1297	1139	959	975	1302	1862	1376	1409	1535	1379	15,139
<i>Surgical Cases.</i>													
Boils	1			2						2	2	3	10
Fracture	1							1			1	1	4
Foreign bodies removed			2							1			3
Hemorrhoids			1	1	1		2	1					6
Hernia			1	1			1			1			4
Teeth extracted	9	11	17	16	12	9	11	14	11	9	16	12	147
Wounds, contused	3	3	3	1		3		5	5	3	8	6	40
Wounds, incised	3	5				1						1	10
Vaccination	22												22
Hydrocele			2		1								3
Appendicitis				2	1								3
Cancer				1									1
Operation on hand				1									1
Phimosis					1		1		1				3
Fistula								1		1			2
Sprains		1		2		2	1			4	7	6	23
Unclassified		10			1				2	4			17
Totals	39	30	26	27	17	15	16	22	19	25	34	29	299
Excused from daily labor	49	62	76	48	21	29	77	140	24	86	149	236	1,097
Admitted to hospital	3	2	10	8	5	8	7	4	3	6	5	5	66
Died	2			2		2		3		1	1	2	13

Medical cases treated.....15,139
Surgical cases treated.....299

Total.....15,438

TABLE No. 3.

Deaths—July 1, 1902, to June 30, 1904.

Date.		Number and Name.		Age.	Cause of Death.
1902—	July 3	4029.	Schofield, Henry	40	Nephritis.
	Sept. 4	4802.	Marsh, Charles	30	Cirrhosis of liver.
	Sept. 26	5173.	Haines, Frank M.	42	Executed.
	Oct. 10	5128.	Steiner, John	43	General debility.
1903—	Jan. 22	3165.	Varela, T.	38	Cancer of liver.
	Mar. 3	3310.	Miller, Orin	29	Concussion of brain.
	Mar. 26	3760.	Wilkinson, Henry	42	Phthisis pulmonalis.
	April 10	4865.	Smith, J. D.	25	Phthisis pulmonalis.
	April 10	4913.	Peters, Guy	21	Phthisis pulmonalis.
1903—	July 1	4960.	Bustamente, R.	27	Drowned.
	July 15	5236.	Johnson, Edward	30	Phthisis pulmonalis.
	Oct. 23	4805.	Emanuel (an Indian)	28	Gunshot wound.
	Oct. 27	5423.	O'Leary, J. J.	22	Paralysis of the heart.
	Dec. 15	2934.	Hanson, Charles	48	Tuberculosis.
	Dec. 27	5049.	Walsh, William	37	Gastria cancer.
1904—	Feb. 3	3429.	Wor Ah Lock	41	Tuberculosis.
	Feb. 5	4452.	Peterson, Edward	29	Tuberculosis.
	Feb. 6	5509.	Glover, William	28	Executed.
	April 24	5027.	Randall, Arthur	39	Tubercular peritonitis.
	May 19	5337.	Willoughby, E. G.	31	Sarcoma of bladder.
	June 10	5326.	Kokichi Hidaka	21	Executed.
	June 25	5074.	Halyley, Thomas	27	Stricture of pyloric orifice.

THIRTY-FIFTH ANNUAL REPORT

OF THE

INSURANCE COMMISSIONER

FOR THE

STATE OF CALIFORNIA,

YEAR ENDING DECEMBER 31, 1902.

E. MYRON WOLF, Insurance Commissioner.



SACRAMENTO:

W. W. SHANNON, : : : SUPERINTENDENT STATE PRINTING.
1903.

THIRTY-FIFTH ANNUAL REPORT

OF THE

INSURANCE COMMISSIONER OF THE STATE OF CALIFORNIA.

INSURANCE DEPARTMENT,

SAN FRANCISCO, August 1, 1903.

To His Excellency, GEORGE C. PARDEE,

Governor of the State of California:

SIR: In accordance with the provisions of Section 595 of the Political Code, I submit herewith the thirty-fifth Annual Report of this Department, showing the condition of the insurance business in the State of California, for the year ending December 31, 1902.

A comparison of the business done in the year 1902 with that of 1901 shows a very satisfactory increase in every phase of insurance business, with the exception of marine and fire insurance.

FIRE INSURANCE.

Compared with the business for 1901 there was a decrease in the amount of fire insurance written by the companies, to the extent of \$33,898,676, with a decrease of \$182,417.49 in premiums received, while the losses paid out were greater than those of 1901 by \$310,720.53.

In view of the prosperous condition of business throughout California during the year, the showing that less insurance was written than during the previous year would occasion surprise were not the fact taken into consideration that during the year 1901 a great amount of insurance written on three-year contracts expired and was renewed. This business was originally placed upon the books of the companies during the "rate war" of 1895, when rates were so tempting that three-year contracts were very extensively written, and renewed itself in 1898 and in 1901. Investigation into the amount of new insurance business written shows a considerable increase, and is indicative of the general progress and prosperity throughout California.

During the year six new fire companies were admitted to the State, and authorized to transact business therein; namely, Rochester German of Rochester, N. Y., German Fire of Peoria, Ill., Globe and Rutgers Fire of New York, and the National Union Fire of Pittsburg, Pa.; while the six following named companies discontinued business in this State: Occidental of San Francisco, Merchants of Newark, Reading Fire of Reading, Baloise Fire of Balse, Switzerland, and the Imperial and Lion Fire, both of London.

The following summary shows the fire business for the year 1902, indicating the amount of risks written, premiums received, losses paid, and the ratio of losses to premiums, as to California companies, companies of other States, and companies of foreign countries, and the totals thereof:

	California Companies.	Companies of Other States.	Companies of Foreign Countries.	Totals.
Risks written..	\$37,014,531 00	\$221,774,946 00	\$227,712,495 00	\$486,501,972 00
Premiums rec'd	607,772 12	3,380,841 86	3,351,370 41	7,339,984 39
Losses paid...	212,029 06	1,265,583 10	1,177,689 42	2,655,301 58
Ratio of losses to premiums..	34.9	37.4	35.1	36.2

It will be seen that 7.6 per cent of the business was written by California companies, with a loss ratio of 34.9 per cent; 45.6 per cent was written by companies of other States, with a loss ratio of 37.4 per cent; and 46.8 per cent was written by foreign companies, with a loss ratio of 35.1 per cent; while the general average loss ratio on all of the business was 36.2 per cent.

The risks in force December 31, 1902, were \$727,907,063, while the total risks in force at the close of the preceding year amounted to \$676,492,033, showing an increase of \$50,415,030 in the risks in force during the year.

As will be seen by the following figures, during the past twenty years the fire insurance companies have collected in premiums more than \$115,000,000, and have paid out in losses a little less than \$51,000,000:

	Premiums Received.	Losses Paid.	Ratio of Losses to Premiums.
Year ending December 31, 1883.....	\$ 4,191,820 96	\$ 1,639,818 56	39.1
Year ending December 31, 1884.....	4,538,062 44	1,295,594 48	28.5
Year ending December 31, 1885.....	4,540,883 39	2,033,257 05	44.8
Year ending December 31, 1886.....	5,185,772 23	2,654,371 08	51.2
Year ending December 31, 1887.....	5,590,353 89	2,101,482 52	37.6
Total 5 years ending Dec. 31, 1887..	\$ 24,046,892 91	\$ 9,724,523 69	40.4

	Premiums Received.	Losses Paid.	Ratio of Losses to Premiums.
Year ending December 31, 1888.....	\$ 6,087,041 48	\$ 3,049,030 42	50.1
Year ending December 31, 1889.....	6,158,754 64	2,572,001 93	41.7
Year ending December 31, 1890.....	6,303,324 05	2,753,392 22	43.7
Year ending December 31, 1891.....	6,669,998 72	2,408,156 05	36.1
Year ending December 31, 1892.....	6,975,185 15	2,715,819 95	38.9
Total 5 years ending Dec. 31, 1892..	\$ 32,194,304 04	\$13,498,400 57	41.9
Year ending December 31, 1893.....	\$ 6,780,453 93	\$ 2,667,160 24	39.4
Year ending December 31, 1894.....	6,336,734 55	2,815,671 30	44.4
Year ending December 31, 1895.....	4,704,584 11	2,850,672 07	60.6
Year ending December 31, 1896.....	3,817,316 18	2,645,397 45	69.3
Year ending December 31, 1897.....	4,767,019 28	2,637,706 71	55.3
Total 5 years ending Dec. 31, 1897..	\$ 26,406,108 05	\$13,616,607 77	51.6
Year ending December 31, 1898.....	\$ 6,657,887 55	\$ 3,578,294 69	53.7
Year ending December 31, 1899.....	5,545,260 51	2,882,973 60	52.0
Year ending December 31, 1900.....	5,795,506 75	2,430,242 35	41.9
Year ending December 31, 1901.....	7,522,401 88	2,344,581 05	31.2
Year ending December 31, 1902.....	7,339,984 39	2,655,301 58	36.2
Total 5 years ending Dec. 31, 1902..	\$ 32,861,041 08	\$13,891,393 27	42.3
Grand total for 20 years.....	\$115,508,346 08	\$50,730,925 30	43.9

County Fire Mutuals.—Under the provisions of the Act approved April 1, 1897, authorizing the organization and management of county fire insurance companies, ten such companies are transacting business in this State. This phase of insurance has not attained great proportions. Returns indicate that the amount in force December 31, 1902, was \$3,349,757, while the amount in force December 31, 1901, was \$2,523,034, an increase of \$826,723.

The amount written by these companies during the year 1902 was \$1,177,274, while the amount written during the year 1901 was \$928,768, showing an increase of \$248,506.

The losses paid in 1902 amounted to \$5,963.34; in 1901 the losses paid were \$4,135.41; an increase of \$1,827.93 for the year 1902.

MARINE INSURANCE.

The importance of San Francisco as a commercial port is not adequately reflected by the record of the marine insurance business. As will be seen by the table hereinafter set out, showing the premiums received and losses paid during the past twenty years, there does not appear to be a great fluctuation in the amount of annual business for the past twenty years, nor do the figures show such an increase as would be expected.

The premiums received in 1902 were less than those of the previous year by \$109,926.05; the losses paid out were greater by \$95,762.02; and \$1,651,653 represents the decrease in amount of marine insurance written.

The fact that the annual marine premium income as reported to the Insurance Department of the State has not kept pace with the commercial development of the port, is accounted for, largely, by the following reasons:

The steamship companies owning vessels plying in and out of San Francisco being organized and controlled, practically altogether, outside of the State, the insurance is placed in New York and abroad. This refers particularly to the Pacific Mail Steamship Company, Pacific Coast Steamship Company, Kosmos Line steamers, and American-Hawaiian Steamship Company.

The trade with the Orient consists largely of teas and silks destined for Atlantic ports, and cotton and domestics from Atlantic ports, all of which are insured on the other side of the continent.

The Alaskan business is now in the hands of three large corporations, all but one of which are organized outside of the State of California, who either carry their own insurance or place it outside of the State of California.

And finally, the coasting fleet, owned locally, is running largely without insurance, owing to the fact that the ownership is now cut up into very small interests, whereas formerly, practically every vessel was fully insured.

During the year, three new marine companies were admitted to the State; namely, the Australian Alliance of Melbourne, the Bavarian Lloyd Marine of Munich, and the Federal of Jersey City.

The business of marine insurance transacted in the State during the year is shown in the following summary, comparing the business done in companies of this State, those of other States, and those of foreign countries:

	California Companies.	Companies of Other States.	Companies of Foreign Countries.	Totals.
Amount written..	\$32,751,873 00	\$9,929,981 00	\$169,919,443 00	\$212,601,297 00
Premiums rec'd..	296,133 35	123,057 52	1,273,408 39	1,692,599 26
Losses paid.....	193,322 25	73,069 09	807,678 88	1,074,070 22
Ratio of losses to premiums.....	65.2	59.4	64.3	63.5

As will be seen, 15.4 per cent of the business was written by California companies, with a loss ratio of 65.2 per cent; 4.67 per cent of the business was written by United States companies of other States, with a loss ratio of 59.4 per cent; and 72.93 per cent was written by

companies of foreign countries, with a loss ratio of 64.3 per cent; the general average ratio of losses to premiums being 63.5 per cent.

The following figures show the premiums received, losses paid, and ratio of losses to premiums in this State by marine insurance companies during twenty years:

	Premiums Received.	Losses Paid.	Ratio of Losses to Premiums.
1883	\$ 1,587,350 16	\$ 966,784 81	60.9
1884	1,433,138 20	468,410 86	32.7
1885	1,395,993 67	855,630 41	61.3
1886	1,515,279 79	676,325 30	43.8
1887	971,859 86	583,772 27	60.1
Totals	\$ 6,903,621 68	\$ 3,550,923 65	51.4
1888	\$ 1,752,696 58	\$ 955,239 49	54.5
1889	1,602,434 12	926,811 88	57.8
1890	1,526,453 95	1,109,431 64	72.7
1891	1,927,088 44	736,735 18	38.2
1892	1,638,876 63	1,059,120 83	64.6
Totals	\$ 8,447,549 72	\$ 4,787,339 02	56.7
1893	\$ 1,354,439 16	\$ 808,792 67	59.7
1894	1,113,840 90	418,106 22	37.5
1895	1,249,317 11	887,761 60	71.1
1896	1,418,739 79	819,221 66	57.7
1897	1,689,658 74	1,375,911 66	81.4
Totals	\$ 6,825,995 70	\$ 4,309,793 81	63.1
1898	\$ 1,789,140 56	\$ 765,624 90	42.8
1899	1,557,487 19	818,261 22	52.5
1900	1,938,123 83	1,134,047 78	58.5
1901	1,802,525 31	978,308 20	54.3
1902	1,692,599 26	1,074,070 22	63.5
Totals	\$ 8,779,876 15	\$ 4,770,312 32	54.4
Grand totals.....	\$30,957,043 25	\$17,418,368 80	56.6

LIFE INSURANCE—LEVEL-PREMIUM COMPANIES.

The life insurance business of California transacted by the level-premium, or "old line," companies, shows a very gratifying increase during the year, the returns of the companies indicating that the amount of life insurance written during the year was \$41,946,481, an increase of \$8,996,201 over the previous year, represented by 5,725 new policies.

The amount of insurance in force December 31, 1902, was \$200,-412,279, while the amount in force at the close of the previous year was \$176,802,624, showing an increase of \$23,609,655, represented by 13,046 policies.

This applies purely to the ordinary life business. The industrial business is gaining rapidly in popularity, there being in force at the close of the year more than \$18,000,000 of this character of insurance.

During the year two more life insurance companies were authorized to transact business in this State; namely, Provident Life and Trust Company of Philadelphia, and Minnesota Mutual Life of St. Paul.

The following summaries show more fully the conditions of the life insurance business for the year past:

ORDINARY BUSINESS.

Number of policies in force.....	84,317
Amount of insurance in force.....	\$200,412,488 00
Premiums received.....	7,480,488 89
Losses paid.....	2,887,479 63

INDUSTRIAL BUSINESS.

Number of policies in force.....	92,665
Amount of insurance in force.....	\$18,426,555 00
Premiums received.....	794,018 00
Losses paid.....	117,748 30

The following figures show the premiums received in California during the past twenty years by the life insurance companies to have been nearly \$76,000,000, while the losses and endowments paid by them were slightly in excess of \$37,000,000:

	Premiums Received.	Losses and Endowments Paid.
1883	\$ 1,561,673 17	\$ 1,565,709 61
1884	1,548,671 16	1,426,340 26
1885	1,590,344 82	1,114,844 57
1886	1,802,916 68	1,116,729 44
1887	2,073,203 65	1,051,055 11
Totals	\$ 8,576,809 48	\$ 6,274,678 99
1888	\$ 2,839,141 80	\$ 1,205,106 91
1889	3,253,759 62	1,545,497 51
1890	3,507,207 07	1,485,143 27
1891	3,818,753 65	1,626,832 60
1892	4,096,824 84	1,594,898 56
Totals	\$17,515,686 98	\$ 7,457,478 85
1893	\$ 4,255,153 76	\$ 2,093,825 96
1894	4,086,307 40	1,943,243 18
1895	4,077,486 45	1,973,822 49
1896	4,004,510 06	2,106,786 19
1897	4,252,455 64	2,068,975 06
Totals	\$20,675,913 31	\$10,186,652 88

	Premiums Received.	Losses and Endowments Paid.
1898	\$ 4,491,699 78	\$ 2,471,974 78
1899	4,925,429 09	2,473,543 38
1900	5,683,412 06	2,430,650 33
1901	6,242,443 41	2,975,847 61
1902	7,480,488 89	2,887,479 63
Totals	\$28,823,473 23	\$13,239,495 73
Grand totals.....	\$75,591,883 00	\$37,158,306 45

LIFE INSURANCE—ASSESSMENT COMPANIES.

The decline in business done by the life insurance companies operating upon the assessment plan is clearly indicated in the appended table, which shows the number of assessment companies that have operated in California during the last twelve years, the amounts written by them, the receipts, and the losses paid.

At the present time there are but three such companies authorized to do business in the State. The greatest number that operated in the State was during the year 1894, when twenty-nine such companies were authorized to transact business in the State; and from 1891 to 1898 there were always more than fifteen such companies doing business, with a total annual income ranging from five to seven and one half millions of dollars.

Of the three companies now in California, one—the Bankers Life Association, of Des Moines, Iowa—confines itself strictly to a life insurance business. The other two are California corporations—the Decimal Life Insurance Company, and the Fidelity Mutual Aid Association. The latter confines itself strictly to health and accident business, and the former is doing no business whatever.

The following figures summarize the assessment life insurance business in California for the past twelve years:

	Number of Companies.	Amount Written and Renewed.	Receipts on Same.	Losses Paid.
1891	16	\$ 18,788,125 00	\$ 561,053 01	\$ 763,225 09
1892	20	25,180,475 00	477,966 24	528,735 23
1893	25	29,620,825 00	484,135 44	469,445 83
1894	29	31,271,375 00	508,266 34	561,273 93
1895	19	41,899,185 00	607,228 95	510,067 93
1896	23	35,827,305 00	699,654 03	518,945 63
1897	21	46,662,051 00	751,878 70	331,860 16
1898	16	25,603,482 00	613,969 23	407,237 55
1899	6	13,986,050 00	246,167 33	189,382 84
1900	6	9,464,000 00	127,416 54	54,313 12
1901	3	6,813,000 00	74,127 03	31,924 67
1902	3	8,077,000 00	71,119 75	33,394 80
Totals		\$293,192,873 00	\$5,222,982 59	\$4,399,806 78

ACCIDENT INSURANCE.

Two new accident companies were added to the list of those authorized to transact business in the State during the past year, one being the Continental Casualty of Hammond, Indiana, and the other being the Pacific Coast Casualty Company, which was organized by residents of San Francisco, and commenced business November 22, 1902.

The premiums received by the accident insurance companies for the year 1902 exceed those of 1901 by \$46,926.12.

The condition of the accident business for the year is shown by the following figures:

Amount written.....	\$98,861,574 00
Premiums received.....	408,840 65
Losses paid.....	133,992 48

FIDELITY AND SURETY INSURANCE.

In this branch of the insurance business the premiums for 1902 were \$33,138.37 more than those of the preceding year.

One company, the Empire State Surety Company of New York, withdrew from the State.

Amount written.....	\$75,702,606 00
Premiums received.....	242,193 96
Losses paid.....	59,171 50

EMPLOYERS LIABILITY INSURANCE.

In this branch of insurance the premiums for the year were greater than those of 1901 in the sum of \$77,813.75; the figures for the business being as follows:

Amount written.....	\$20,897,700 00
Premiums received.....	297,169 78
Losses paid.....	102,778 66

TITLE INSURANCE.

Due largely to increased investments in realty throughout the State, this branch of insurance business has become very profitable; the increase in premiums over those of the previous year being \$42,280.23.

Two title insurance companies operate in San Francisco, and one company in Los Angeles. Of these, the Title Insurance and Guaranty Company of San Francisco was organized during the year, and authorized to transact business on July 31, 1902. In the case of the Los Angeles company, however, the returns do not accurately indicate the volume of business done, for the reason that a form of certificate issued by the company, which is not strictly speaking an insurance policy, is generally accepted in the southern part of the State, and takes the place of what would otherwise have to be title insurance.

The figures for this business for the year are as follows:

Amount written.....	\$17,196,493 00
Premiums received.....	95,729 30
Losses paid.....	3,938 74

BURGLARY INSURANCE.

In burglary insurance the increase over the previous year's premiums is only \$2,450.89; the figures being as follows:

Amount written.....	\$1,176,656 00
Premiums received.....	9,888 98
Losses paid.....	927 13

PLATE-GLASS INSURANCE.

This character of insurance received greater premiums than during the previous year, in the sum of \$7,528.50; the business summarizing as follows:

Amount written.....	\$1,579,906 00
Premiums received.....	35,594 42
Losses paid.....	12,654 64

STEAM-BOILER INSURANCE.

Steam-boiler insurance for the year earned greater premiums than those of the previous year by \$11,590.19; the business being indicated by the following figures:

Amount written.....	\$4,284,917 00
Premiums received.....	29,935 29
Losses paid.....	188 40

CREDIT INDEMNITY INSURANCE.

This is a new character of insurance, and seems to be gaining ground in California, as elsewhere. The premiums earned in 1902 were \$17,907.01 more than those of 1901. The figures for the business are as follows:

Amount written.....	\$876,300 00
Premiums received.....	55,790 01
Losses paid.....	21,001 13

LEGISLATION AND TAXATION.

One of the most important legislative insurance enactments that has been placed upon the statute books of California in many years was the passage of a law, at the last session of the Legislature, placing a tax upon all insurance companies, other than life, not organized or

incorporated under the laws of this State. The new law (Section 622a, Political Code) is as follows:

Every insurance company or association other than life, not organized or incorporated under the laws of California, and doing business in this State, and every other insurance company other than life, whose charter may be owned, or a majority of whose stock shall be controlled, or whose business shall be carried on in the interest, or for the benefit of any insurance company or association not organized or incorporated under the laws of California, shall annually pay to the Insurance Commissioner, as taxes, two (2) per cent upon the amount of gross premiums received upon its business done in this State, during the year ending on the thirty-first day of December, less return premiums, reinsurance in companies or associations authorized to do business in this State, and losses actually paid on its business in this State.

This section shall not be held or construed so as to relieve any company or organization from any tax, fee, or other obligation imposed upon it by the provisions of Section 622 of this code, but the taxes imposed by said section, and paid to the Insurance Commissioner by any such company or association under the provisions of said section, shall be deducted from the amount to be paid by such company or association to the Insurance Commissioner under the provisions of this section.

This Act shall take effect January 1, 1904, and all of the provisions hereof shall be construed as applying to the business done in the year 1903, and each year thereafter.

Prior to the adoption of this law the tax levy in the State upon insurance companies was purely retaliatory, and depended therefore upon the tax laws of the States wherein the companies were organized. This worked a manifest injustice upon most of the companies, in that the foreign fire and marine companies, and those companies organized in certain States, such as Connecticut, Rhode Island, and New Hampshire, escaped entirely the payment of any State tax.

The basic theory of State supervision of insurance was that the companies should be called upon to contribute sufficient sums to meet the departmental expenses and the amount necessary for the enforcement of the laws passed for the protection of the companies and the public. When it is noted that during the past twenty years nearly \$650,000 has been collected from the insurance companies by the State, and more than \$510,000 has been turned into the State Treasury, over and above the cost of maintaining this Department, it will be seen how far beyond the fundamental conception thereof insurance taxation has advanced.

It was certainly unfair that all foreign companies and certain American companies should pay nothing more to the State than the twenty-dollar fee required for the filing of the annual statement, while their competitors were compelled to contribute thousands of dollars to the State Treasury.

The new law specifically retains the retaliatory measure, and at the same time makes State taxation upon insurance companies, with the exception of life insurance companies, general. The amount of the tax—two per cent of the gross premiums less return premiums, rein-

insurance in companies or associations or corporations authorized to do business in this State, and losses actually paid on business done in this State—is certainly equitable. The items eliminated represent money paid out to citizens of this State, and the tax is not, strictly speaking, net upon the profits of the companies, in that their regular expenses are to be met out of them. It should also be borne in mind that throughout the State there are local, municipal, and county taxes, which are estimated at nearly one and a half per cent of the gross premiums of the companies.

The wisdom of eliminating life insurance companies from the provisions of this Act is apparent when it is realized that, with the exception of only one company, all of the life companies operating in California are conducted upon the mutual plan, and any money paid out in the form of taxes by these companies would come out of the California policy-holders.

The following compilation shows the amount of fees and taxes paid by the companies to the State during the past twenty years:

	Fees and Taxes Collected.	Amount Turned In.
1883	\$ 17,001 01	\$ 8,409 02
1884	20,453 51	13,877 12
1885	23,373 40	16,688 36
1886	13,210 03	7,589 09
1887	31,652 28	24,869 99
1888	28,928 60	22,786 95
1889	31,070 91	24,893 56
1890	28,244 09	21,710 64
1891	32,188 43	25,495 47
1892	35,126 30	28,336 87
1893	34,316 49	27,455 44
1894	32,934 13	26,183 37
1895	32,236 29	24,275 59
1896	24,879 13	18,178 27
1897	24,150 05	17,274 71
1898	33,046 92	26,267 08
1899	46,207 89	39,498 56
1900	44,370 63	37,342 08
1901	49,780 94	43,065 79
1902	64,134 88	57,403 83
Totals	\$647,305 91	\$511,601 79

If such a law as that under discussion had been in force during this period of twenty years, the amount collected would have been far greater. For the year ending December 31, 1902, the returns would have been twice as great.

It is regrettable that, on account of the unusually heavy fire losses which are being sustained during the present year, the returns for the first year of the operation of the new law will not be so high as past

experience would have indicated. The current year has been one of the worst known to the underwriters in California, and on the Pacific Coast generally. For the six months ending June 30, 1903, the loss ratio for the Pacific Coast has been 65 per cent, and that for California 58 per cent. It should be noted that the past twenty years of fire business in California show an average loss ratio of 43.9 per cent.

The only other statute relating to insurance that was placed upon the books by the last Legislature was an amendment to the Code of Civil Procedure (Section 383), providing that when the same person is insured by two or more insurers, separately and in respect to the same subject and interest, such person, or the payee under the policy, or the assignee of the cause of action, or successor in interest of such assured or payee, may join all or any of such insurers in a single action for the recovery of a loss under the several policies, and, in case of judgment, a several judgment must be rendered against each of such insurers, according as his liability shall appear.

As a result of the systematic campaign inaugurated by certain interests, a mutual fire insurance bill passed both houses of the Legislature, but failed to receive the approval of your Excellency. Such measures have frequently been introduced, and met with varying degrees of success in our Legislatures, but the experiences of States wherein this form of insurance has been tried do not seem to warrant the enactment of such legislation in California.

Another enactment that indirectly concerned this Department was the passage of the Act adding Sections 4458 and 4459 to the Political Code, in reference to the character of newspapers in which official publications might be inserted. Heretofore there had been required no proof of the publication of the annual statement showing the condition of insurance companies, as provided in Section 611 of the Political Code. I caused all the companies to be notified that hereafter affidavits of publication must be filed with this Department. The question arose as to whether or not publication in the "Daily Commercial News" and "Journal of Commerce" was in compliance with the new law, and I submitted the question to the Attorney-General, who now has the matter under consideration.

In this connection I deem it but proper to express my appreciation of the courtesies extended this Department by Attorney-General U. S. Webb, and especially by his deputy, George A. Sturtevant.

PUBLICATION OF INSURANCE LAWS.

When in May, 1902, I assumed the office of Insurance Commissioner, the printing fund of the Department was so depleted as not to permit

the publication of the annual report of this Department during that year. It was hoped that the Legislature would make provision therefor, but this was not done. It was then determined to compile the insurance laws, and that the money left in the printing fund should be used in the publication thereof. Though there was a real necessity for the publication of the insurance laws by this Department, the work had never been officially done. About thirty years ago the Commissioner then in office did so as a private venture, and for some time past a local publisher has issued them in pamphlet form, but the profits were not sufficient to warrant him in keeping up the work. Requests are frequently received from the Departments of other States, and from people anxious to inquire into insurance conditions in California, for copies of the laws. It seems but proper, therefore, that there should be an official publication of them.

COMPANY EXAMINATIONS.

On February 24th of this year, at my request, Deputy Commissioner M. M. Rhorer examined the Pacific Surety Company and verified its annual statement for the year 1902. With the exception of a trifling error, which was corrected, the statement was correct, and I have so certified.

On June 2d of this year, in company with the Hon. Sam H. Nichols, Secretary of State of the State of Washington, who has jurisdiction in that State over insurance matters, and his deputy, J. H. Schively, who has direct charge of such matters, at the request of the Conservative Life Insurance Company of Los Angeles, I examined that company, and found that the statement filed by them in compliance with the law on January 31, 1903, showing the business for 1902, was correct, and I have so certified.

MUTUAL RESERVE LITIGATION.

On June 24, 1903, an alternative writ of mandate, together with a petition therefor, was served upon me, commanding me to issue a certificate of authority to the Mutual Reserve Life Insurance Company, or to show cause in the Superior Court for not so doing. The petition for the writ prays for judgment against me in the sum of \$50,000. The Mutual Reserve Fund Association was an assessment company, organized under the laws of the State of New York. In 1902 it was reorganized as "The Mutual Reserve Life Insurance Company," and during that year papers were filed by the company with this Department, upon which was based an application for permission to do business in this State. This has not been granted by this Department.

COMPANIES ADMITTED AND WITHDRAWN.

During the year 1902 the following-named companies were admitted to transact business in this State:

Rochester German.....	Rochester, N. Y.
Provident Life and Trust.....	Philadelphia, Pa.
Continental Casualty.....	Hammond, Ind.
Bavarian Lloyd Marine.....	Munich, Germany.
Title Insurance and Guaranty.....	San Francisco, Cal.
Rhine and Moselle Fire.....	Strasburg, Germany.
Australian Alliance.....	Melbourne, Australia.
Minnesota Mutual Life.....	St. Paul, Minn.
Firemen's.....	Baltimore, Md.
Pacific Coast Casualty.....	San Francisco, Cal.
German Fire.....	Peoria, Ill.
Globe and Rutgers Fire.....	New York, N. Y.
National Union Fire.....	Pittsburg, Pa.
Federal.....	Jersey City, N. J.

And the following-named companies discontinued business in this State:

Occidental.....	San Francisco, Cal.
Merchants.....	Newark, N. J.
Reading Fire.....	Reading, Pa.
Baloise Fire.....	Basle, Switzerland.
Imperial.....	London, England.
Lion Fire.....	London, England.
Empire State Surety.....	New York, N. Y.

The paid-up capital stock of all the companies admitted to do business during the year is \$5,925,000, and the paid-up capital stock of all the companies that ceased doing business in the State during the year is \$1,700,000.

FINANCIAL STATEMENT.

The following statement shows the amount received by the State during the year for taxes and fees, and the expenditures by this office, the balance to the credit of the State being \$57,403.83:

Received during the year for taxes and fees.....	\$64,134 88
<i>Expenditures.</i>	
Office salaries.....	\$4,800 00
Office rent.....	900 00
Messenger	597 00
Telephone	122 15
Stationery	21 35
Postage stamps.....	55 75
Expressage	27 75
Expenses moving office, carpets, etc.....	98 30
Incidentals	108 75
	<hr/>
	6,731 05
Balance	<hr/>
	\$57,403 83

Respectfully submitted.

E. MYRON WOLF,
Insurance Commissioner.

TABLE No. 1.

Showing Business of California Insurance Companies for the year 1902—California business.

FIRE.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.	Ratio of Losses to Premiums.
Fireman's Fund	San Francisco	\$26,089,927 00	\$420,980 92	\$144,622 22	34.3
Home Fire and Marine	San Francisco	10,924,604 00	186,791 20	67,406 84	36.1
Totals		\$37,014,531 00	\$607,772 12	\$212,029 06	34.9

MARINE.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.	Ratio of Losses to Premiums.
Fireman's Fund	San Francisco	\$24,028,176 00	\$226,938 86	\$148,287 53	65.3
Home Fire and Marine	San Francisco	8,623,697 00	69,194 49	45,034 72	65.1
Totals		\$32,751,873 00	\$296,133 35	\$193,322 25	65.2

TABLE No. 2.

Showing Amount and Description of Risks in Force on December 31, 1902, of California Companies—California business.

Name.	Location.	Fire.		Marine.	
		Risks.	Premiums.	Risks.	Premiums.
Fireman's Fund	San Francisco	\$40,136,768 00	\$610,948 23	\$3,203,552 00	\$136,435 61
Home Fire and Marine	San Francisco	18,470,676 00	286,740 21	848,984 00	41,107 54
Totals		\$58,607,444 00	\$897,688 44	\$4,052,536 00	\$177,543 15

TABLE No. 3.—Showing the Business of California County Mutual Fire Insurance Companies for the year 1902—California business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
Humboldt County Fire.	Ferndale.	\$41,248 00	\$527 40	\$1,034 00
Los Angeles County Mutual Fire.	Los Angeles.	305,724 00	1,832 57	541 34
Orange County Farmers' Mutual Fire.	Santa Ana.	141,106 00	531 79	1,500 00
San Bernardino County Mutual Fire.	Ontario.	119,530 00	153 52	7 50
Sacramento County Patrons and Farmers' Mutual Fire.	Sacramento.	60,855 00	-----	None.
Santa Barbara County Farmers' Mutual Fire.	Santa Barbara.	67,497 00	510 50	None.
Santa Clara County Fire.	San José.	49,802 00	291 41	None.
Scandinavian Mutual Protective Fire.	Kingsburg.	140,693 00	-----	314 00
Sonoma County Farmers' Mutual Fire.	Santa Rosa.	123,918 00	-----	None.
Ventura County Mutual Fire.	San Buenaventura.	126,895 00	1,659 56	2,566 50
Totals.		\$1,177,274 00	\$5,506 75	\$5,963 34

TABLE No. 4.—Showing the Fire Business of Insurance Companies of other States for the year 1902—California business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.	Ratio of Losses to Premiums.
Aetna.	Hartford.	\$8,856,095 00	\$131,847 14	\$48,539 83	36.8
Agricultural.	Watertown, N. Y.	2,935,145 00	41,095 89	15,862 83	33.7
American.	Newark.	2,307,080 00	38,886 34	20,149 11	51.8
American.	Boston.	2,318,777 00	33,205 02	11,851 72	35.6
American Central.	St. Louis.	2,515,917 00	42,673 78	15,673 02	36.7
American Fire.	Philadelphia.	3,842,852 00	70,196 03	26,327 05	37.5
Assurance Company of America.	New York.	202,685 00	3,851 53	42 92	1.1
Caledonian-American.	New York.	944,855 00	16,815 75	8,897 19	52.9
Citizens.	St. Louis.	2,098,691 00	32,295 03	13,053 61	40.4
Commercial Union Fire.	New York.	333,577 00	4,745 58	68 89	1.3
Connecticut Fire.	Hartford.	5,761,529 00	96,300 10	30,124 86	31.3
Continental.	New York.	12,037,356 00	151,169 48	51,274 66	33.9
Delaware.	Philadelphia.	986,363 00	22,225 35	6,983 08	31.4
Dutchess.	Poughkeepsie.	2,338,358 00	37,430 71	12,595 08	33.6
Equitable Fire and Marine.	Providence, R. I.	1,297,255 00	23,759 52	14,514 25	61.1
Fire Association.	Philadelphia.	3,638,096 00	62,548 06	32,846 53	52.5
Firemen's.	Baltimore.	567,188 00	7,614 16	328 75	4.3
Franklin Fire.	Philadelphia.	4,000,788 00	62,669 86	27,853 39	44.4

German	Freeport, Ill.	9,370,547 00	125,483 93	36,232 04	28.8
German Alliance	New York	1,845,195 00	30,038 62	10,963 80	36.4
German-American	New York	8,280,473 00	136,222 25	53,274 28	39.1
German Fire	Peoria, Ill.	115,750 00	1,662 70	None	---
Germania Fire	New York	5,254,109 00	63,914 12	13,112 80	20.5
Glens Falls	Glens Falls, N. Y.	3,657,582 00	55,876 97	17,941 13	32.1
Globe and Rutgers Fire	New York	134,485 00	1,955 70	None	---
Globe	New York	922,916 00	16,416 54	9,770 99	59.9
Greenwich	New York	2,994,863 00	49,413 96	23,998 03	48.5
Hanover Fire	New York	19,501,801 00	291,188 24	108,039 22	37.2
Hartford Fire	Hartford	13,766,142 00	224,282 59	114,262 48	50.9
Home	New York	711,210 00	10,403 26	2,179 07	20.9
Indemnity Fire	New York	7,134,807 00	112,916 01	54,680 11	48.4
Insurance Company of North America	Philadelphia	473,506 00	4,739 82	930 56	19.6
Kings County Fire	New York	883,523 00	12,848 61	2,969 82	23.1
Mercantile Fire and Marine	Boston	1,177,218 00	22,706 46	5,802 84	25.5
Michigan Fire and Marine	Detroit	8,576,551 00	104,310 97	44,136 53	42.3
Milwaukee	Milwaukee	6,797,437 00	123,037 35	43,984 17	35.8
National Fire	Hartford	225,053 00	4,161 10	42 91	1.1
National Standard	New York	273,135 00	3,864 27	None	---
National Union Fire	Pittsburg	1,343,101 00	22,354 36	8,059 79	36.0
New Hampshire Fire	Manchester	839,782 00	13,288 39	3,030 91	22.9
New York Fire	New York	9,035,738 00	106,422 78	17,653 50	16.6
Niagara Fire	New York	1,017,663 00	13,569 81	3,341 48	24.6
North German Fire	New York	6,873,907 00	87,218 28	29,794 35	34.0
Northwestern National	Milwaukee	1,759,553 00	24,253 60	8,059 86	33.2
Orient	Hartford	835,064 00	14,958 35	5,496 49	30.1
Pelican	New York	7,977,784 00	138,905 51	54,848 06	39.5
Pennsylvania Fire	Philadelphia	3,035,496 00	52,025 87	19,013 60	36.5
Phoenix	Brooklyn	4,909,788 00	81,077 24	34,969 18	43.1
Providence-Washington	Hartford	1,693,043 00	30,152 20	13,451 04	44.5
Queen	Providence, R. I.	4,483,864 00	75,337 06	27,563 53	36.6
Rochester German	New York	1,905,426 00	26,784 50	6,647 00	24.8
Springfield Fire and Marine	Rochester, N. Y.	4,982,346 00	87,269 33	37,073 03	42.5
St. Paul Fire and Marine	Springfield, Mass.	2,294,657 00	38,682 61	18,634 48	48.2
Teutonia	St. Paul	1,575,713 00	26,496 38	13,400 05	50.7
Traders	New Orleans	7,311,412 00	108,766 40	44,454 74	40.9
United Firemen's	Chicago	1,286,267 00	19,389 14	4,955 32	25.5
Victoria Fire	Philadelphia	590,320 00	9,124 27	1,511 36	16.6
Westchester Fire	Philadelphina	402,637 00	5,910 16	1,976 11	33.4
Williamsburg City Fire	New York	4,510,359 00	63,284 14	15,554 67	24.6
Totals	Brooklyn	4,018,111 00	60,808 68	16,806 00	27.6
		\$221,774,946 00	\$3,380,841 86	\$1,265,583 10	37.4

TABLE No. 5.

Showing the Fire Risks in Force in California on December 31, 1902—Companies of other States.

Name.	Location.	Risks.	Premiums.
Ætna	Hartford	\$15,033,519 00	\$208,751 01
Agricultural	Watertown, N. Y.	3,180,297 00	45,114 21
American	Newark	4,300,620 00	75,122 15
American	Boston	3,209,590 00	45,879 65
American Central	St. Louis	3,160,453 00	47,763 64
American Fire	Philadelphia	4,645,158 00	83,240 37
Assurance Company of America	New York	202,685 00	3,387 84
Caledonian-American	New York	1,550,303 00	24,807 40
Citizens	St. Louis	2,461,674 00	39,016 72
Commercial Union Fire	New York	381,027 00	4,678 99
Connecticut Fire	Hartford	8,757,562 00	122,600 48
Continental	New York	24,672,331 00	263,907 66
Delaware	Philadelphia	1,081,590 00	23,792 75
Dutchess	Poughkeepsie	2,711,611 00	43,257 36
Equitable Fire and Marine	Providence, R. I.	1,880,872 00	30,108 80
Fire Association	Philadelphia	6,218,265 00	95,171 92
Firemen's	Baltimore	567,188 00	7,577 21
Franklin Fire	Philadelphia	Not given	
German	Freeport, Ill.	16,746,200 00	166,366 02
German Alliance	New York	3,150,260 00	42,670 10
German-American	New York	14,697,412 00	203,752 30
German Fire	Peoria, Ill.	115,750 00	1,662 70
Germania Fire	New York	8,438,707 00	99,491 40
Glens Falls	Glens Falls, N. Y.	4,023,340 00	61,464 66
Globe and Rutgers Fire	New York	134,485 00	1,935 70
Greenwich	New York	1,302,105 00	19,772 81
Hanover Fire	New York	4,731,870 00	69,179 00
Hartford Fire	Hartford	32,296,550 00	347,370 26
Home	New York	22,025,827 00	358,852 14
Indemnity Fire	New York	702,494 00	9,841 81
Insurance Co. of North America	Philadelphia	12,536,343 00	182,939 80
Kings County Fire	New York	660,082 00	6,547 66
Mercantile Fire and Marine	Boston	1,980,004 00	29,398 56
Michigan Fire and Marine	Detroit	1,294,939 00	22,402 34
Milwaukee Mechanics	Milwaukee	15,252,088 00	168,022 78
National Fire	Hartford	6,797,437 00	123,037 35
National Standard	New York	225,053 00	3,600 84
National Union Fire	Pittsburg	273,135 00	3,864 27
New Hampshire Fire	Manchester	1,964,601 00	27,504 41
New York Fire	New York	862,182 00	13,550 54
Niagara Fire	New York	11,267,565 00	132,731 91
North German Fire	New York	1,236,858 00	15,599 58
Northwestern National	Milwaukee	17,366,762 00	184,288 70
Orient	Hartford	1,645,176 00	22,492 13
Pelican	New York	971,031 00	16,814 20
Pennsylvania Fire	Philadelphia	15,056,134 00	232,299 30
Phenix	Brooklyn	4,479,098 00	68,924 79
Phoenix	Hartford	9,754,855 00	139,862 06
Providence-Washington	Providence, R. I.	2,440,975 00	41,853 30
Queen	New York	6,927,090 00	101,163 31
Rochester German	Rochester, N. Y.	1,672,891 00	24,014 56
Springfield Fire and Marine	Springfield, Mass.	4,982,345 00	87,269 33
St. Paul Fire and Marine	St. Paul	3,862,307 00	54,035 71
Teutonia	New Orleans	Not given	
Traders	Chicago	9,712,225 00	130,417 28
Union	Philadelphia	1,598,851 00	21,760 71
United Firemen's	Philadelphia	645,873 00	10,590 11
Victoria Fire	New York	430,577 00	6,401 67
Westchester Fire	New York	6,992,823 00	82,876 25
Williamsburg City Fire	Brooklyn	4,419,922 00	66,961 68
Totals		\$339,694,967 00	\$4,567,762 19

TABLE No. 6.
Showing the Fire Business of Insurance Companies of Foreign Countries for the year 1902—California business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.	Ratio of Losses to Premiums.
Aachen and Munich Fire	Aix-la-Chapelle, Germany	\$7,826,397 00	\$125,466 73	\$46,082 99	36.7
Alliance	London	6,063,352 00	89,647 17	26,370 58	29.4
Atlas	London	6,974,294 00	101,394 71	47,674 34	47.0
British America	Toronto	3,186,720 00	60,469 00	22,893 63	37.8
Caledonian	Edinburgh	5,008,524 00	75,835 63	23,609 77	31.1
Commercial Union	London	9,487,779 00	147,690 70	52,603 57	35.6
Hamburg-Bremen Fire	Hamburg	7,174,150 00	108,418 61	33,872 00	31.2
Helvetia Swiss Fire	St. Gall, Switzerland	4,015,664 00	48,072 85	17,924 91	37.3
Law Union and Crown	London	2,531,928 00	37,788 92	17,349 00	45.9
Liverpool and London and Globe	Liverpool	15,925,432 00	213,314 45	59,747 94	28.0
London	London	19,561,292 00	207,799 00	52,066 41	25.1
London and Lancashire Fire	Liverpool	13,019,952 00	179,762 97	69,980 61	38.9
Manchester	Manchester	5,916,930 00	85,771 26	27,326 63	31.8
Netherlands Fire and Life	The Hague	3,064,877 00	41,855 87	5,150 38	12.3
New Zealand	Auckland	3,702,907 00	55,922 55	23,200 11	41.5
North British and Mercantile	London	6,155,123 00	94,352 68	36,593 96	38.8
Northern	London	7,067,217 00	105,056 19	44,587 22	42.4
North German Fire	Hamburg	6,709,343 00	93,197 05	40,590 37	43.6
Norwich Union Fire	Norwich, England	5,506,849 00	95,433 79	40,505 66	42.4
Palatine	London	6,046,622 00	94,247 31	22,148 83	23.5
Phoenix	London	7,317,756 00	125,325 40	59,514 43	47.5
Prussian National	Stettin	4,326,834 00	57,769 34	27,355 55	47.3
Rhine and Moselle Fire	Strasbourg	1,827,747 00	21,362 69	777 25	3.6
Royal	Liverpool	10,941,367 00	182,100 12	67,971 93	37.3
Royal Exchange	London	8,820,630 00	127,193 77	40,369 52	31.7
Scottish Union and National	Edinburgh	4,536,802 00	66,091 48	22,032 03	33.3
State Fire	Liverpool	2,173,090 00	33,072 86	4,552 80	13.8
Sun Fire	London	7,327,351 00	121,351 00	25,113 00	20.7
Svea Fire and Life	Gothenburg, Sweden	5,442,350 00	104,165 77	49,311 79	47.3
Thuringia	Erfurt, Germany	11,723,429 00	176,916 38	67,371 14	38.0
Transatlantic Fire	Hamburg	8,661,169 00	123,213 78	46,423 70	37.7
Union	London	4,932,102 00	67,944 50	21,729 89	31.9
Western	Toronto	4,736,516 00	83,325 82	34,887 48	41.9
Totals		\$227,712,495 00	\$3,351,370 41	\$1,177,689 42	35.1

TABLE No. 7.

*Showing Fire Risks in Force of Companies of Foreign Countries on December 31, 1902—
California business.*

Name.	Location.	Risks.	Premiums.
Aachen and Munich Fire	Aix-la-Chapelle, Ger...	\$12,360,657 00	\$175,379 67
Alliance	London	8,083,055 00	110,445 32
Atlas	London	12,537,060 00	162,588 75
British America	Toronto	Not given	
Caledonian	Edinburgh	8,270,863 00	105,174 84
Commercial Union	London	12,785,731 00	185,853 97
Hamburg-Bremen Fire	Hamburg	9,875,325 00	137,513 50
Helvetia Swiss Fire	St. Gall, Switzerland ..	5,273,055 00	59,616 46
Law Union and Crown	London	2,835,759 00	42,323 59
Liverpool and London and Globe ..	Liverpool	22,871,198 00	329,724 65
London	London	27,776,620 00	294,432 17
London and Lancashire Fire	Liverpool	13,469,957 00	184,666 98
Manchester	Manchester	9,639,793 00	125,163 77
Netherlands Fire and Life	The Hague	2,703,749 00	37,388 69
New Zealand	Auckland	7,051,617 00	92,363 09
North British and Mercantile	London	10,205,660 00	141,554 53
Northern	London	9,809,590 00	139,480 94
North German Fire	Hamburg	10,989,398 00	127,757 18
Norwich Union Fire	Norwich, England	7,800,713 00	114,165 47
Palatine	London	7,793,666 00	104,946 01
Phoenix	London	11,273,864 00	176,755 70
Prussian National	Stettin	7,214,564 00	86,785 52
Rhine and Moselle Fire	Strasbourg	1,827,747 00	21,110 50
Royal	Liverpool	17,465,259 00	257,828 72
Royal Exchange	London	15,257,802 00	193,332 97
Scottish Union and National	Edinburgh	11,989,165 00	159,671 62
State Fire	Liverpool	2,079,304 00	31,510 24
Sun Fire	London	9,159,189 00	138,303 75
Svea Fire and Life	Gothenburg, Sweden	6,495,471 00	122,963 83
Thuringia	Erfurt, Germany	19,392,907 00	261,968 98
Transatlantic Fire	Hamburg	13,208,510 00	166,657 90
Union	London	5,523,954 00	76,097 84
Western	Toronto	6,583,450 00	107,968 58
Totals		\$329,604,652 00	\$4,471,495 73

TABLE No. 8.

Showing the Business of Marine Insurance Companies, other than California Companies, for the year 1902—California business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.	Ratio of Losses to Premiums.
Alliance	Berlin	\$5,645,248 00	\$67,316 00	\$31,022 90	46.1
Alliance Marine	London	3,321,196 00	33,764 82	3,258 91	9.7
American and Foreign Marine	New York	1,641,096 00	2,709 26	3,578 43	132.1
Australian Alliance	Melbourne	332,529 00	3,730 01	None	-----
Baloise	Basle, Switzerland	8,482,928 00	71,425 57	59,249 96	82.9
Bavarian Lloyd	Munich	5,549,563 00	20,006 83	4,603 47	23.0
Boston	Boston	440,210 00	9,698 95	8,001 20	82.5
British America	Toronto	718,454 00	30,984 08	23,270 79	75.1
British and Foreign Marine	Liverpool	22,505,351 00	135,217 16	78,540 05	58.1
Canton	Hong Kong	12,784,617 00	78,067 75	39,973 14	50.8
China Traders	Hong Kong	1,836,912 00	5,104 09	5,000 00	97.9
Commercial Union	London	13,797,348 00	51,724 95	12,401 82	23.9
Delaware	Philadelphia	1,010,151 00	10,547 20	842 58	7.9
Federal	Jersey City	36,655 00	3,092 56	None	-----
Fonciere	Paris	6,235,778 00	42,730 45	34,600 90	80.9
Frankfort Marine, Accident, and Plate Glass	Frankfort, Germany	2,730,521 00	10,504 69	24,412 90	232.4
Helvetia General	St. Gall, Switzerland	8,482,928 00	71,425 57	59,249 86	82.9
Imperial Marine	Tokio	1,304,042 00	3,861 36	15,182 98	399.5
Indemnity Mutual Marine	London	1,035,958 00	20,500 15	16,406 79	80.0
Insurance Company of North America	Philadelphia	3,941,518 00	53,503 44	33,951 42	63.4
London	London	2,335,490 00	21,429 87	27,223 41	127.0
London and Provincial Marine and General	London	2,014,399 00	30,744 74	25,729 41	83.7
Mannheim	Mannheim	1,791,628 00	6,705 63	4,776 36	71.2
Man On	London	642,176 00	1,800 42	3,436 91	190.1
Marine	Hong Kong	3,069,215 00	44,485 99	4,542 30	10.2
Maritime	Liverpool	2,637,755 00	51,970 96	21,010 20	40.4
New Zealand	Auckland	2,898,939 00	26,843 70	13,568 35	50.5
North China	Shanghai	10,880,257 00	24,118 07	13,374 46	55.4
Ocean Marine	London	8,833,019 00	24,186 00	26,015 49	107.5
Po On	Hong Kong	135,496 00	397 53	None	-----
Providence-Washington	Providence, Rhode Island	1,693,405 00	27,310 46	20,682 73	75.7
Prussian National	Stettin	801,609 00	2,791 09	393 28	14.1
Reliance Marine	Liverpool	1,062,868 00	14,028 75	3,005 00	21.4
Royal Exchange	London	2,686,742 00	1,929 32	315 00	16.3

TABLE No. 8—CONTINUED.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.	Ratio of Losses to Premiums.
Sea	Liverpool	\$1,244,580 00	\$18,120 46	\$2,939 37	16.2
Standard Marine	Liverpool	8,923,889 00	47,871 88	26,327 33	54.9
St. Paul Fire and Marine	St. Paul	1,166,946 00	16,195 65	6,012 73	37.1
Switzerland General	Zurich	7,779,576 00	71,140 90	59,249 86	83.3
Thames and Mersey	Liverpool	5,092,428 00	107,137 97	70,420 06	65.7
Union Marine	Liverpool	1,582,160 00	24,396 14	4,488 09	18.4
Universo Marine	Milan, Italy	781,236 00	10,449 90	18,015 22	172.4
Western	Toronto	1,699,981 00	42,947 51	32,304 98	75.2
Wilhelma	Magdeburg	2,232,335 00	22,059 10	14,146 95	64.1
Yangtse	Shanghai	5,840,292 00	30,948 98	29,222 53	95.9
Totals .....	.....	\$179,849,424 00	\$1,396,465 91	\$880,747 97	63.1

TABLE No. 9.

*Showing Marine Risks in Force in Other than California Companies on December 31,
1902—California business.*

Name.	Location.	Risks.	Premiums.
Alliance	Berlin	\$908,825 00	\$22,676 70
Alliance Marine	London	846,745 00	15,455 88
American and Foreign Marine	New York	62,420 00	365 16
Australian Alliance	Melbourne	166,160 00	2,732 41
Baloise	Basle, Switzerland	863,672 00	29,699 82
Bavarian Lloyd	Munich	168,621 00	1,057 09
Boston	Boston	96,779 00	5,964 59
British America	Toronto	427,484 00	27,218 80
British and Foreign Marine	Liverpool	2,593,769 00	35,082 27
Canton	Hong Kong	1,040,199 00	42,856 17
China Traders	Hong Kong	221,588 00	470 69
Commercial Union	London	1,133,997 00	14,951 84
Delaware	Philadelphia	78,056 00	2,885 81
Federal	Jersey City	183,275 00	3,092 56
Fonciere	Paris	732,650 00	29,314 05
Frankfort Marine, Accident, and Plate Glass	Frankfort, Ger.	None	-----
Helvetia General	St. Gall, Switzerland	863,672 00	29,699 82
Imperial Marine	Tokio	84,264 00	3,699 24
Indemnity Mutual Marine	London	2,028,217 00	35,495 51
Insurance Company of North America	Philadelphia	893,831 00	35,339 05
London	London	609,297 00	8,471 86
London & Provincial Marine and Gen.	London	776,959 00	12,164 81
Mannheim	Mannheim	87,536 00	4,047 29
Man On	Hong Kong	57,538 00	174 50
Marine	London	1,267,935 00	19,026 62
Maritime	Liverpool	702,829 00	28,931 52
New Zealand	Auckland	464,093 00	18,368 72
North China	Shanghai	492,295 00	4,942 13
Ocean Marine	London	611,704 00	6,772 52
Po On	Hong Kong	135,496 00	397 53
Providence-Washington	Providence, R. I.	419,839 00	18,415 64
Prussian National	Stettin	1,765 00	9 50
Reliance Marine	Liverpool	472,125 00	6,595 31
Royal Exchange	London	None	-----
Sea	Liverpool	475,817 00	7,319 32
Standard Marine	Liverpool	869,628 00	11,141 09
St. Paul Fire and Marine	St. Paul	284,161 00	9,010 50
Switzerland General	Zurich	863,672 00	29,699 82
Thames and Mersey	Liverpool	2,281,490 00	71,672 31
Union Marine	Liverpool	654,105 00	11,124 28
Universo Marine	Milan, Italy	165,500 00	7,719 55
Western	Toronto	556,656 00	28,180 17
Wilhelma	Magdeburg	221,411 00	4,941 25
Yangtse	Shanghai	772,382 00	11,135 87
Totals		\$26,638,457 00	\$658,319 57

TABLE No. 10.

Showing New Policies Written during the year, Policies Renewed, and Amount of Policies in Force on December 31, 1902, of Life Insurance Companies doing business in California—California business.

Name.	Location.	New Policies Written.			Policies Renewed.			Policies in Force December 31, 1902.		Losses and Endowments Paid.
		No.	Amount.	Premium.	No.	Amount.	Premium.	No.	Amount.	
Aetna Life	Hartford	475	\$1,063,700 00	\$47,707 60	1,044	\$2,508,000 00	\$96,512 51	1,819	\$3,836,100 00	\$53,426 00
Connecticut Mutual Life	Hartford	227	445,000 00	17,992 38	1,975	4,679,500 00	159,736 72	2,454	5,446,383 00	120,970 00
Conservative Life	Los Angeles	640	1,862,273 00	58,621 75	757	2,030,870 00	66,453 63	934	2,496,870 00	19,000 00
Equitable Life	New York	3,270	7,960,020 00	331,206 63	6,658	19,927,884 00	790,311 39	11,075	30,100,330 00	229,293 34
Fidelity Mutual Life	Philadelphia	342	852,537 00	22,586 04	1,389	3,064,457 00	84,163 25	1,731	3,916,994 00	15,464 18
Germania Life	New York	224	458,500 00	18,401 14	1,166	2,874,000 00	115,853 01	1,432	3,625,990 00	48,452 54
Home Life	New York	227	507,000 00	15,355 28	1,176	2,520,575 00	99,698 20	1,514	3,091,751 00	33,734 92
Manhattan Life	New York	154	409,500 00	18,424 23	1,054	3,301,022 00	37,245 47	1,455	3,889,189 00	105,138 00
Massachusetts Mutual Life	Springfield	184	426,300 00	16,468 72	563	1,080,611 00	37,245 47	747	1,506,911 00	11,488 94
Metropolitan Life	New York	2,868	2,599,919 00	69,457 00	417	435,563 00	12,305 00	2,526	2,370,648 00	3,125 00
Minnesota Mutual Life	St. Paul	12	39,000 00	1,494 23	171	444,000 00	11,047 67	183	483,000 00	10,000 00
Mutual Life	New York	1,689	3,919,283 00	321,545 50	9,064	26,036,155 00	1,150,420 92	12,544	33,715,068 00	801,236 93
Mutual Benefit Life	Newark	496	1,401,702 00	57,917 01	1,756	5,395,926 00	220,965 87	2,387	7,233,222 00	105,174 00
National Life	Montpelier, Vt.	225	560,000 00	22,768 47	1,276	2,820,590 00	101,144 06	1,501	3,380,590 00	15,500 00
New England Mutual Life	Boston	509	935,500 00	36,942 10	3,005	6,556,700 00	260,348 96	4,131	8,173,578 00	153,034 55
New York Life	New York	3,054	6,130,425 00	285,179 40	9,099	25,540,962 00	1,034,310 88	13,131	33,342,065 00	518,738 05
Northwestern Mutual Life	New York	986	2,059,540 00	84,975 62	4,944	11,831,799 00	358,332 95	5,930	13,891,339 00	208,408 77
Northwestern National Life	Minneapolis	25	46,000 00	1,133 92	400	900,000 00	15,866 08	6,750	12,720,609 00	209,913 00
Pacific Mutual Life	San Francisco	2,472	3,149,207 00	139,568 00	4,143	9,062,793 00	329,040 75	6,502	11,362,938 00	68,500 00
Penn Mutual Life	Philadelphia	1,292	2,741,539 00	109,797 70	3,300	8,621,399 00	303,465 20	4,506	10,777,850 00	12,187 64
Phoenix Mutual Life	Hartford	134	245,000 00	10,833 15	402	832,850 00	35,319 99	536	1,077,850 00	11,500 00
Provident Life and Trust	Philadelphia	246	536,500 00	19,263 92	655	1,793,205 00	60,390 98	753	2,171,205 00	20,000 00
Provident Savings Life	New York	102	383,000 00	13,746 92	218	529,199 00	24,928 27	630	1,597,952 00	4,500 00
Prudential	Newark	369	968,101 00	44,111 84	218	529,199 00	24,928 27	630	1,597,952 00	4,500 00
Security Trust and Life	Philadelphia	23	58,000 00	1,142 10	28	44,527 00	4,454 95	51	102,527 00	---
State Life	Indianapolis	---	---	---	---	---	---	---	---	---
Travelers	Hartford	134	243,830 00	10,491 68	799	1,898,700 00	65,792 34	943	2,153,530 00	35,500 00
Union Central Life	Cincinnati	181	658,355 00	23,058 44	785	1,842,425 00	63,288 00	966	2,500,780 00	12,296 00
Union Mutual Life	Portland, Me.	582	804,750 00	31,993 70	2,013	3,229,254 00	116,288 50	2,798	4,285,742 00	53,225 60
Washington Life	New York	194	462,000 00	22,145 78	439	1,578,871 00	46,312 93	737	1,632,000 00	7,612 17
Totals	---	21,246	\$41,946,481 00	\$1,854,230 05	58,653	\$151,140,137 00	\$5,789,307 70	84,317	\$200,412,279 00	\$2,887,479 63
Metropolitan Life (Indus.)	New York	50,880	\$10,202,571 00	\$346,916 00	66,201	\$13,365,877 00	\$447,103 00	92,665	\$18,426,555 00	\$117,748 30

TABLE No. 11.

Showing the Business of Accident Insurance Companies for the year 1902—California business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
Aetna Life.....	Hartford.....	\$11,012,100 00	\$33,024 86	\$12,520 23
Continental Casualty.....	Hammond, Ind.....	128,400 00	2,380 09	2,756 00
Employers Liability.....	London.....	3,170,500 00	15,949 60	3,495 19
Fidelity and Casualty.....	New York.....	13,640,050 00	39,299 57	7,764 23
Frankfort-American.....	New York.....	74,000 00	217 85	None.
Frankfort Marine, Accident, and Plate Glass.....	Frankfort, Ger.....	1,994,000 00	15,410 81	8,886 90
London Guarantee and Accident.....	London.....	737,000 00	3,904 95	5,353 21
Maryland Casualty.....	Baltimore.....	7,527,000 00	3,956 28	978 92
New Amsterdam Casualty.....	New York.....	850,850 00	4,135 18	460 00
North American Accident.....	Chicago.....	1,710,352 00	4,670 39	1,886 01
Pacific Mutual Life.....	San Francisco.....	15,784,863 00	125,453 93	34,207 90
Preferred Accident.....	New York.....	17,416,650 00	48,812 75	8,200 29
Royal Exchange.....	London.....	273,000 00	1,450 00	None.
Standard Life and Accident.....	Detroit.....	6,484,350 00	29,434 48	13,403 96
Travelers.....	Hartford.....	14,444,434 00	65,537 42	29,778 49
Union Casualty and Surety.....	St. Louis.....	3,614,025 00	15,222 49	4,301 15
Totals.....		\$98,861,574 00	\$408,840 65	\$133,992 48

TABLE No. 12.

Showing the Business of Employers Liability Insurance Companies for the year 1902—California business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
Aetna Life.....	Hartford.....	\$460,000 00	\$2,241 20	None.
Employers Liability.....	London.....	2,118,700 00	77,563 45	\$14,274 92
Fidelity and Casualty.....	New York.....	3,130,000 00	20,855 40	12,900 40
Frankfort Marine, Accident, and Plate Glass.....	Frankfort, Ger.....	8,130,000 00	95,572 92	41,530 08
London Guarantee and Accident.....	London.....	1,620,000 00	17,077 81	6,638 22
Maryland Casualty.....	Baltimore.....	1,866,500 00	46,654 98	19,995 35
New Amsterdam Casualty.....	New York.....	3,375,000 00	32,324 32	7,439 69
Pacific Coast Casualty*.....	San Francisco.....	92,500 00	4,570 70	None.
Standard Life and Accident.....	Detroit.....	10,000 00	119 00	None.
Travelers.....	Hartford.....	95,000 00	190 00	None.
Totals.....		\$20,897,700 00	\$297,169 78	\$102,778 66

* Commenced business November 22, 1902.

TABLE No. 13.

Showing the Fidelity and Surety Business for the year 1902—California business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
Aetna Indemnity.....	Hartford.....	\$283,693 00	\$1,390 89	None.
American Bonding.....	Baltimore.....	3,927,532 00	14,190 14	\$15 00
American Surety.....	New York.....	6,312,693 00	20,462 43	36,122 65
City Trust Safe Deposit and Surety.....	Philadelphia.....	593,125 00	3,625 87	None.
Employers Liability.....	London.....	257,500 00	1,115 06	None.
Fidelity and Casualty.....	New York.....	1,137,700 00	3,808 27	2,638 13
Fidelity and Deposit.....	Baltimore.....	19,836,532 00	57,255 76	2,990 60
National Surety.....	New York.....	19,317,582 00	46,800 35	3,853 23
Pacific Surety.....	San Francisco.....	12,835,741 00	49,123 61	1,088 57
United States Fidelity and Guaranty.....	Baltimore.....	11,200,508 00	44,421 58	12,458 32
Totals.....		\$75,702,606 00	\$242,193 96	\$59,171 50

TABLE No. 14.

Showing Plate Glass Insurance for the year 1902—California business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
Etna Indemnity	Hartford	\$74,977 00	\$1,649 38	\$70 93
Fidelity and Casualty	New York	210,050 00	4,370 65	1,478 41
Frankfort Marine, Accident, and Plate Glass	Frankfort, Ger. ..	208,016 00	3,028 46	1,833 26
Lloyds Plate Glass	New York .....	.....	2,555 67	831 37
Maryland Casualty	Baltimore	35,319 00	2,184 94	938 78
Metropolitan Plate Glass	New York	193,285 00	3,989 99	1,331 03
New York Plate Glass	New York	567,058 00	10,735 39	4,218 16
Pacific Surety	San Francisco ..	131,519 00	3,287 97	785 91
Union Casualty and Surety	St. Louis	159,682 00	3,791 97	1,166 79
Totals .....	.....	\$1,579,906 00	\$35,594 42	\$12,654 64

TABLE No. 15.

Showing Steam Boiler Insurance for the year 1902—California business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
Fidelity and Casualty	New York	\$944,000 00	\$5,242 19	None.
Frankfort-American	New York	80,000 00	538 55	None.
Hartford Steam Boiler	Hartford	3,125,917 00	23,640 60	\$188 40
Maryland Casualty	Baltimore	135,000 00	513 95	None.
Totals .....	.....	\$4,284,917 00	\$29,935 29	\$188 40

TABLE No. 16.

Showing Burglary Insurance for the year 1902—California business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
Fidelity and Casualty	New York	\$553,850 00	\$5,134 24	\$479 83
Maryland Casualty	Baltimore	10,000 00	17 92	None.
New Amsterdam Casualty	New York	71,956 00	753 55	190 00
United States Fidelity and Guar- anty	Baltimore	540,850 00	3,983 27	257 30
Totals .....	.....	\$1,176,656 00	\$9,888 98	\$927 13

TABLE No. 17.

Showing Title Insurance for the year 1902—California business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
California Title Insurance and Trust	San Francisco ..	\$11,864,495 00	\$74,856 00	\$221 95
Title Insurance and Guaranty ..	San Francisco ..	1,186,025 00	9,556 50	None.
Title Insurance and Trust	Los Angeles	4,145,973 00	11,316 80	3,716 79
Totals .....	.....	\$17,196,493 00	\$95,729 30	\$3,938 74

TABLE No. 18.

Showing Credit Indemnity Insurance for the year 1902—California business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
American Credit Indemnity	New York	\$610,800 00	\$36,715 00	\$6,451 57
Ocean Accident and Guarantee	London	265,500 00	19,075 01	14,549 56
Totals .....	.....	\$876,300 00	\$55,790 01	\$21,001 13

TABLE No. 19.

Showing the Business of Assessment Life and Sick Benefit Insurance for the year 1902—California business.

Name.	Location.	New Policies Written.			Policies Renewed.			In Force December 31, 1902.		Losses Paid.
		No.	Amount Written.	Premiums on Same.	No.	Amount Renewed.	Premiums on Same.	No.	Amount.	
Bankers Life Association ..	Des Moines, Ia. .	561	\$1,122,000 00	\$2,371 80	2,387	\$4,774,000 00	\$48,895 72	2,948	\$5,896,000 00	\$28,000 00
Decimal Mutual Life	San Francisco ..	No report.								
Fidelity Mutual Aid	San Francisco ..	1,600	1,639,000 00	11,032 31	527	542,000 00	8,819 92	1,327	1,361,000 00	5,394 80
Totals .....	.....	2,161	\$2,761,000 00	\$13,404 11	2,914	\$5,316,000 00	\$57,715 64	4,275	\$7,257,000 00	\$33,394 80

TABLE No. 20.

Showing year of organization, location, names of President, Secretary, and Agent or Attorney for California, and date of certificate of authority issued by Insurance Commissioner, and date of commencement of business in California, of all Insurance Companies authorized to transact business, on Dec. 31, 1902.

Year Organized.	Name.	Location.	President.	Secretary.	Agent for California.	Date of Certificate Issued by Insurance Commissioner.	Commenced Business in California.
1863	Fireman's Fund	San Francisco	Wm. J. Dutton	L. Weinmann		June 24, 1868	June 18, 1863
1861	Home Fire and Marine	San Francisco	Wm. A. Kelsey	Stephen D. Ives		June 24, 1868	June 13, 1861
1825	Aachen and Munich Fire	Aix-la-Chapelle	Wm. B. Clark	Manager	Cesar Bertheau	April 21, 1893	April 21, 1893
1819	Edina	Hartford	Wm. B. Sawyer	Wm. H. King	Boardman & Spencer	June 1, 1868	June 20, 1865
1833	Agricultural	Watertown, N. Y.	A. H. Sawyer	W. H. Stevens	E. Brown & Sons	Aug. 1, 1897	Aug. 2, 1876
1800	Alliance	Berlin	Carl Thieme	P. Srelinski	Gutte & Frank	Dec. 22, 1892	Dec. 22, 1892
1821	Alliance	London	Weed & Kennedy, U. S.	Managers	C. F. Mullins	June 2, 1892	June 2, 1892
1824	Alliance Marine	London	Erd Rothschild	Douglas Owen	J. J. Moore & Co.	May 24, 1881	May 24, 1881
1816	American	Newark	E. O. Doremus	J. H. Worden	Christensen, Edwards & Goodwin	Aug. 24, 1896	Aug. 24, 1896
1818	American	Roston	Francis Peabody	H. S. Bean	C. J. Stovel	Dec. 23, 1897	Dec. 23, 1897
1833	American Central	St. Louis	Geo. T. Crann	Jno. H. Adams	C. Christensen	April 15, 1871	April 15, 1871
1810	American Fire	Philadelphia	T. H. Montgomery	Jno. H. Packard, Jr.	E. Brown & Sons	Oct. 31, 1872	Oct. 31, 1872
1897	American and Foreign Marine	New York	W. H. L. Simpson	J. E. Hoffman	Balfour, Guthrie & Co.	July 21, 1898	July 21, 1898
1896	Assurance Co. of America	New York	C. A. Rathbone	R. B. Kathbone	C. A. Henry & Co.	July 9, 1897	July 9, 1897
1808	Atlas	London	C. A. Prescott	S. J. Pipkin	F. J. Devlin	Aug. 15, 1885	Aug. 15, 1885
1862	Australian Alliance	Melbourne	George Shaw	T. B. Roberts	Parrott & Co.	Sept. 11, 1902	Sept. 11, 1902
1804	Baloise Marine	Basle	R. Iselin	Tho. Kaden	Syz & Co.	Nov. 28, 1876	Nov. 28, 1876
1873	Boston	Boston	R. B. Fuller	Tho. H. Lord	H. J. Knowles	Aug. 22, 1882	Aug. 22, 1882
1833	British America	Toronto	Geo. A. Cox	P. H. Sims	Watson, Taylor & Sperry	Mar. 11, 1875	Mar. 11, 1875
1863	British and Foreign Marine	Liverpool	Richard Holson	A. McNeil	Balfour, Guthrie & Co.	Oct. 10, 1868	Aug. 25, 1861
1805	Caledonian	Edinburgh	Chas. H. Post	Manager	Thos. J. Conroy	July 21, 1885	July 21, 1885
1897	Caledonian-American	New York	Chas. H. Post	N. A. McNeil	Thos. J. Conroy	Dec. 21, 1898	Dec. 21, 1898
1881	Canton	Hong Kong	C. W. Dickson	E. C. Emmett	Parrott & Co.	June 21, 1882	June 21, 1882
1865	China Traders	Hong Kong	Ernest Goetz	E. W. Matland	Williams, Dimond & Co.	Sept. 1, 1871	Sept. 1, 1871
1857	Citizens	St. Louis	S. E. Waggoner	John H. Carr	Belden & Palamde	April 22, 1901	April 22, 1901
1861	Commercial Union Fire	London	A. H. Wray, U. S. Manager	W. M. Ballard	C. F. Mullins	June 22, 1870	June 22, 1870
1890	Commercial Union Fire	New York	A. H. Wray	W. M. Ballard	C. F. Mullins	June 1, 1896	June 1, 1896
1850	Connecticut Fire	Hartford	J. D. Browne	Chas. R. Burt	Benj. J. Smith	Aug. 20, 1873	Aug. 20, 1873
1852	Continental	New York	Henry Evans	J. E. Lopez	Arthur G. Nason	Sept. 1, 1872	Sept. 1, 1872
1835	Delaure	Philadelphia	T. Paulding	H. Iglbarn	E. Brown & Sons	May 3, 1900	May 3, 1900
1836	Dutchess	Poughkeepsie	L. H. Vail	J. J. Graham	C. J. Stovel	Mar. 15, 1901	Mar. 15, 1901
1839	Equitable Fire and Marine	Providence, R. I.	F. W. Arnold	J. E. Tillinghast	Wm. J. Dutton	June 28, 1890	June 28, 1890
1901	Federal	Jersey City	Percy Chubb	M. Grandner	Chas. Gibbons	Dec. 18, 1902	Dec. 18, 1902
1820	Fire Association	Philadelphia	E. C. Irvin	M. G. Garrigues	Gutte & Frank	Dec. 9, 1873	Dec. 9, 1873
1825	Firemen's	Baltimore	F. E. S. Wolfe	Harry L. Ryall	C. J. Stovel	Oct. 15, 1902	Oct. 15, 1902
1879	Fonclere	Paris	G. Robert	E. Seris	Mann & Willson	Nov. 20, 1880	Nov. 20, 1880
1829	Franklin Fire	Philadelphia	J. W. McAllister	E. T. Cresson	Geo. F. Grant	May 15, 1885	May 15, 1885
1865	German	Freeport, Ill.	C. O. Collumier	W. Trembor	C. H. Ward	Sept. 28, 1900	Sept. 28, 1900
1865	German Alliance	New York	W. N. Kremer	C. G. Smith	Geo. H. Tyson	Mar. 8, 1897	Mar. 8, 1897
1872	German Alliance	New York	W. N. Kremer	C. G. Smith	Geo. H. Tyson	Oct. 10, 1873	Oct. 10, 1873
1876	German Fire	Peoria	B. Cremer	Chs. Cremer	Gutte & Frank	Nov. 28, 1902	Nov. 28, 1902

1859	Germania Fire	New York	Hugo Schumann	C. Ruykhaer	W. H. Breeding	Aug. 29, 1900	Aug. 29, 1900
1849	Glens Falls	Glens Falls, N. Y.	J. L. Cunningham	R. A. Little	E. E. Potter	Jan. 31, 1900	Jan. 31, 1900
1849	Globe and Rutgers Fire	New York	E. C. Jameson	Lyman Candee	E. Brown & Sons	Nov. 28, 1902	Nov. 28, 1902
1851	Greenwich	New York	M. A. Stone	W. B. Ward	Tom C. Grant	June 10, 1890	June 10, 1890
1851	Hamburg-Bremen Fire	Hamburg	F. O. Afield, U. S. Manager	W. B. Ward	R. Herold, Jr.	Sept. 26, 1868	May 4, 1862
1852	Hanover Fire	New York	C. A. Shaw	J. McCord	Cesar Bertheau	Oct. 25, 1869	Oct. 25, 1869
1810	Hartford Fire	Hartford	Geo. L. Chase	P. C. Royce	Belden & Falache	Jan. 17, 1870	Jan. 17, 1870
1858	Helvetia General	St. Gall	F. Halmayer	M. J. Grossmann	Syz & Co.	Nov. 26, 1876	Nov. 26, 1876
1861	Helvetia Swiss Fire	St. Gall	J. H. Washburn	Managers	Syz & Co.	Dec. 6, 1876	Dec. 6, 1876
1853	Home	New York	M. Takel	A. M. Burtis	Harry L. Roff	Nov. 13, 1868	Nov. 13, 1868
1893	Imperial Marine	Tokio	J. H. Henshaw, U. S. Manager	J. H. Burger	Macdonald & Co.	June 20, 1898	June 20, 1898
1897	Indemnity Fire	New York	J. M. Hare	J. T. Mainland	W. H. Lowden	July 18, 1901	July 18, 1901
1824	Indemnity Mutual Marine	London	J. N. Bullen	G. E. Fryer	Evans C. Evans	Oct. 11, 1888	Oct. 11, 1888
1794	Ins. Co. of North America	Philadelphia	Chas. Platt	C. J. Wolf	F. J. Devlin	Oct. 11, 1872	Oct. 11, 1872
1858	Kings County Fire	New York	Frank Lock	Managers	Catton, Bell & Co.	Oct. 11, 1899	Oct. 11, 1899
1825	Law Union and Crown	London	Hall & Henshaw, U. S. Manager	Managers	Chas. D. Haven	July 13, 1898	July 13, 1898
1720	Liverpool and London and Globe	Liverpool	H. W. Eaton, U. S. Manager	Managers	Wm. J. Landers	Sept. 26, 1868	May 1, 1862
1861	Liverpool and Lancashire Fire	Liverpool	Chas. L. Gase, U. S. Manager	Managers	Wm. Macdonald	Aug. 28, 1872	Aug. 28, 1872
1860	London & Prov. Marine & Gen'l	London	A. G. McIlwaine, Jr., U. S. Manager	H. S. B. Cooley	Girvin & Eyre	Nov. 6, 1879	Nov. 6, 1879
1870	Manchester	Manchester	F. W. Lunan	Manager	Thos. J. Conroy	April 3, 1879	April 3, 1879
1824	Mannheim	Mannheim	G. S. A. Young, U. S. Manager	Manager	Beede & Le Boyteau	April 22, 1880	April 22, 1880
1879	Man On	Hong Kong	Ko Shun Kam	Chas. Shi Ki	Wing Tuck & Co.	Nov. 10, 1884	Nov. 10, 1884
1881	Marine	London	Robert Baring	H. C. Nicholson	G. W. McNear	Oct. 31, 1881	Oct. 31, 1881
1836	Marine	Liverpool	E. H. Cookson	J. C. Nicholson	Livingston, Smith & Co.	Sept. 11, 1877	Sept. 11, 1877
1823	Mercantile Fire and Marine	Boston	Geo. R. Rogers	Jas. Simpson	C. A. Henry & Co.	Mar. 3, 1898	Mar. 3, 1898
1881	Mercantile Fire and Marine	Detroit	D. M. Ferry	E. J. Booth	L. L. Bromwell	May 1, 1901	May 1, 1901
1852	Michigan Fire and Marine	Milwaukee	Wm. L. Jones	O. Griebling	Geo. D. Dornin	April 12, 1894	April 12, 1894
1871	Milwaukee Mechanics	Hartford	Jas. Nichols	B. R. Stillman	C. A. Henry & Co.	Aug. 5, 1884	Aug. 5, 1884
1896	National Fire	New York	R. B. Rathbone	E. E. Pieper	Arthur G. Nason	Nov. 28, 1902	Nov. 28, 1902
1901	National Union Fire	Pittsburg	W. B. Rathbone	E. E. Cole	Wm. Macdonald	Jan. 2, 1900	Jan. 2, 1900
1845	Netherlands Fire and Life	The Hague	W. B. Rathbone	Managers	George H. Tyson	May 2, 1900	May 2, 1900
1869	New Hampshire Fire	Manchester	W. B. Rathbone	F. W. Sargeant	C. J. Stovel	Mar. 15, 1901	Mar. 15, 1901
1832	New York Fire	New York	M. C. Crosby	Chas. A. Hull	W. P. Thomas	Mar. 27, 1875	Mar. 27, 1875
1859	New Zealand	Auckland	A. Colson	Manager	Wm. J. Landers	Oct. 18, 1878	Oct. 18, 1878
1850	Niagara Fire	New York	H. Herick	Geo. W. Dewey	Tom C. Grant	Sept. 26, 1868	Sept. 26, 1868
1808	North British and Mercantile	London	W. T. Price	R. Carmichael	Macdonald & Co.	June 13, 1875	June 13, 1875
1863	North China	Shanghai	W. D. Little	H. E. Wilson	W. J. Wilson	Sept. 26, 1868	Sept. 26, 1868
1836	Northern	London	W. E. Hubbard	J. Baesecke	Walter Speyer	Sept. 20, 1877	Sept. 20, 1877
1868	North German Fire	Hamburg	J. Nordheim	E. Harbers	G. W. Turner	June 8, 1899	June 8, 1899
1899	North German Fire	New York	Adolph Loeb	W. D. Reed	H. W. Lowden	Feb. 27, 1889	Feb. 27, 1889
1869	Northwestern National	Milwaukee	Alfred James	C. A. B. Bignold	H. M. Newhall & Co.	July 13, 1877	July 13, 1877
1797	Norwich Union Fire	Norwich, Eng.	F. A. Cubitt	Alfred Price	Wm. Macdonald	June 20, 1890	June 20, 1890
1859	Ocean Marine	London	A. H. Campbell	James Wyper	C. F. Mullins	Mar. 10, 1891	Mar. 10, 1891
1867	Orient	Hartford	A. G. McIlwaine, Jr., U. S. Manager	Manager	Butler & Hewitt	Jan. 3, 1901	Jan. 3, 1901
1900	Palatine	London	A. H. Wray, U. S. Manager	L. P. Bayard	R. W. Osborn	May 17, 1899	May 17, 1899
1890	Pelican	New York	A. D. Irving	W. G. Crowell	H. M. Spencer	Dec. 20, 1875	Dec. 20, 1875
1825	Pennsylvania Fire	Philadelphia	R. D. Benson	W. A. Wright	George H. Tyson	Nov. 9, 1864	Nov. 9, 1864
1853	Phoenix	Brooklyn	Geo. P. Sheldon	E. Milligan	Butler & Hewitt	July 16, 1868	July 16, 1868
1814	Phoenix	Hartford	D. W. C. Skilton	Un. Lei Chuen	Butler & Hewitt	Dec. 22, 1879	Dec. 22, 1879
1782	Phoenix	London	A. D. Irving, U. S. Manager	S. G. Howe	Butler & Hewitt	Dec. 11, 1896	Dec. 11, 1896
1895	Po On	Hong Kong	Chu Kiang Wan			Dec. 31, 1874	Dec. 31, 1874
1799	Providence-Washington	Providence, R. I.	J. H. De Wolf				

TABLE No. 20—CONTINUED.

Year Organized	Name.	Location.	President.	Secretary.	Agent for California.	Date of Certificate Issued by Insurance Commissioner.	Commenced Business in California.
1845.	Prussian National	Stettin	Theo. W. Letton, U. S.	Manager.	W. Y. Louiza	Nov. 15, 1881	Nov. 15, 1881
1891.	Queen	New York	E. F. Beddall	N. S. Bartow	Rolla V. Watt	Oct. 12, 1891	Oct. 12, 1891
1881.	Reliance Marine	Liverpool	Walter Glynn	F. R. Edwards	Henry Lund & Co.	Dec. 19, 1881	Dec. 19, 1881
1881.	Rhine and Moselle Fire	Strasbourg	F. Schaller	E. Mathis	Syz & Co.	Aug. 29, 1902	Aug. 29, 1902
1872.	Rochester German	Rochester, N. Y.	Frederick Cook	H. F. Atwood	Thos. J. Conroy	Feb. 10, 1902	Feb. 10, 1902
1845.	Royal Exchange	Liverpool	E. F. Beddall, U. S. Manager		Rolla V. Watt	June 23, 1869	June 23, 1869
1720.	Scottish Union and National	London	H. F. Tarkes	W. N. Whymper	F. W. Dickson	May 20, 1891	May 20, 1891
1854.	Sea	Edinburgh	Jas. H. Brewster, U. S. Manager		T. J. A. Tiedemann	July 19, 1881	July 19, 1881
1875.	Springfield Fire and Marine	Liverpool	Geo. Gilhuor	W. A. Edwards	Neyer, Wilson & Co.	July 13, 1876	July 13, 1876
1849.	Standard Fire and Marine	Springfield, Mass.	A. W. Damon	W. J. Mackay	Geo. D. Dornin	April 6, 1881	April 6, 1881
1871.	Standard Marine	Liverpool	J. Williamson	John Gick	Jno. D. Spreckels & Bros.	June 28, 1881	June 28, 1881
1891.	State Fire	Liverpool	Hall & Henshaw, U. S. Managers		W. Macdonald	Nov. 1, 1899	Nov. 1, 1899
1865.	St. Paul Fire and Marine	St. Paul	C. H. Bigelow	A. W. Perry	C. Christensen	Sept. 23, 1872	Sept. 23, 1872
1710.	Sun Fire	London	J. J. Guile, U. S. Manager		C. A. Henry & Co.	Feb. 26, 1886	Feb. 26, 1886
1866.	Svea Fire and Life	Gothenburg, Sweden	A. Wiklander	Ernst Bring	E. Brown & Sons	Sept. 22, 1884	Sept. 22, 1884
1869.	Switzerland General	Zurich	W. H. Diethelm	J. G. Blum	Syz & Co.	Oct. 7, 1874	Oct. 7, 1874
1871.	Tautonia	New Orleans	Albert Noll	F. Langbehn	Mann & Wilson	April 18, 1879	April 18, 1879
1840.	Thames and Mersey	Liverpool	M. Ludewig	J. Kidman	W. G. Harrison	Aug. 21, 1876	Aug. 21, 1876
1853.	Thuringia	Briert, Germany	H. W. Hind	Ernst Lange	Voss, Conrad & Co.	Nov. 16, 1896	Nov. 16, 1896
1865.	Transatlantic Fire	Chicago	T. J. Jeffens	S. A. Kothennel	Gordon & Fraser	June 6, 1873	June 6, 1873
1872.	Union	Hamburg	J. Blumberger, U. S. Manager		V. C. Driffield	Aug. 2, 1872	Aug. 2, 1872
1804.	Union	Philadelphia	C. S. Hollinshead	E. R. Dannels	R. W. Osborn	Oct. 11, 1880	Oct. 11, 1880
1714.	Union	London	Hall & Henshaw, U. S. Managers		Cotton, Bell & Co.	May 20, 1889	May 20, 1889
1863.	United Marine	Liverpool	T. B. Ryden	J. S. Allen	E. L. Woods	July 3, 1874	July 3, 1874
1860.	United Firemen's	Philadelphia	R. B. Beath	D. J. Sweeney	Gutite & Frank	April 16, 1901	April 16, 1901
1889.	Universo Marine	Milan	F. Bertarelli	C. Vuillomencet	Mann & Wilson	Nov. 17, 1889	Nov. 17, 1889
1896.	Victoria Fire	New York	H. H. Hall	E. K. Beddall	Cotton, Bell & Co.	Mar. 14, 1899	Mar. 14, 1899
1837.	Westchester Fire	New York	G. R. Crawford	M. O. Brown	G. M. Mitchell	Mar. 20, 1885	Mar. 20, 1885
1851.	Western	Toronto	Geo. A. Cox	C. C. Foster	Watson, Taylor & Sperry	Jan. 12, 1877	Jan. 12, 1877
1872.	Wilhelma	Nagdeburg	M. S. Driggs	T. Dammann	Gutite & Frank	Aug. 31, 1878	Aug. 31, 1878
1853.	Williamsburg City Fire	Brooklyn	Jas. M. Young	F. H. Way	E. E. Potter	Feb. 12, 1881	Feb. 12, 1881
1862.	Yangtze	Shanghai	M. G. Bulkeley	W. S. Jackson	Balfour, Guthrie & Co.	Oct. 23, 1868	Oct. 23, 1868
1820.	Yema Life	Hartford	J. L. Greene	H. H. English	E. H. Lestock Gregory	Mar. 12, 1879	Mar. 12, 1879
1846.	Connecticut Mutual Life	Hartford	J. L. Greene	H. H. White	A. K. P. Harmon	June 21, 1880	June 21, 1880
1900.	Conservative Life	Los Angeles	Frederick H. Rindge	W. M. Morgan	A. M. Shields	July 9, 1900	July 9, 1900
1859.	Equitable Life	New York	Jas. W. Alexander	A. W. Alexander	G. A. Rathbun	April 27, 1900	April 27, 1900
1900.	Fidelity Mutual Life	Philadelphia	L. G. Fouse	W. S. Campbell	G. A. Jacobs	Feb. 11, 1879	Feb. 11, 1879
1800.	Germania Life	New York	C. Doremus	Carl Heye	Frank Sperling	Oct. 11, 1887	Oct. 11, 1887
1860.	Home Life	New York	George E. Ide	E. W. Gladwin	John Landers	Aug. 2, 1878	Aug. 2, 1878
1851.	Manhattan Life	New York	H. B. Stokes	H. H. Giffin	C. M. T. Parker	May 20, 1891	May 20, 1891
1851.	Massachusetts Mutual Life	Springfield	John A. Hall	H. M. Phillips	T. R. Richardson	Sept. 14, 1901	Sept. 14, 1901
1866.	Metropolitan Life	New York	J. R. Hegeman	Jas. S. Roberts	Jos. A. Peters	Sept. 13, 1902	Sept. 13, 1902
1880.	Minnesota Mutual Life	St. Paul	T. R. Palmer	Douglas Putnam	Stanley Forbes	July 1, 1878	July 1, 1878
1842.	Mutual Life	New York	R. A. McCurdy	W. J. Easton			

1845.	Mutual Benefit Life	Newark	F. Frelinghuysen	E. L. Dobbins	Pickering & Stiles	Sept. 7, 1880	Sept. 7, 1880
1848.	National Life	New York	Jos. A. de Boer	O. D. Clark	G. M. Stolp & Son	June 21, 1886	June 21, 1886
1855.	New England Mutual Life	Boston	B. F. Stevens	S. F. Trull	Henry K. Field	Sept. 26, 1868	Sept. 26, 1868
1841.	New York Life	New York	John A. McCall	C. C. Whitney	Chas. A. McLane	Aug. 20, 1878	Aug. 20, 1878
1857.	Northwestern Mutual Life	Milwaukee	H. L. Palmer	J. C. Skinner	C. M. Smith	May 31, 1882	May 31, 1882
1885.	Northwestern National Life	Minneapolis	W. F. Bechel	F. J. Sackett	F. F. Weed	Dec. 11, 1901	Dec. 11, 1901
1867.	Pacific Mutual Life	San Francisco	Geo. A. Moore	S. M. Marks	E. H. Hart	June 24, 1888	June 24, 1888
1847.	Penn Mutual Life	Philadelphia	H. F. West	H. C. Brown	J. W. Hicks	Feb. 24, 1888	Feb. 24, 1888
1851.	Phenix Mutual Life	Hartford	J. B. Bunce	Wm. A. Moore	V. Wall & Eldridge	Aug. 20, 1880	Aug. 20, 1880
1865.	Provident Life and Trust	Philadelphia	S. R. Shipley	W. M. Borton	Carl C. Gross	Mar. 27, 1902	Mar. 27, 1902
1875.	Provident Savings Life	New York	E. W. Scott	W. E. Stevens	A. F. MacFarland	Oct. 17, 1888	Oct. 17, 1888
1873.	Prudential	Newark	John F. Dryden	Edward Gray	F. McLoughlin	Feb. 2, 1901	Feb. 2, 1901
1894.	State Life	Indianapolis	A. M. Sweeney	W. S. Wynn	F. W. Haskell	April 3, 1901	April 3, 1901
1863.	Travelers	Hartford	S. C. Dunham	J. E. Morris	Chas. W. Mills	July 19, 1878	July 19, 1878
1867.	Union Central Life	Cincinnati	J. M. Pattison	E. P. Marshall	W. C. Leavitt	Feb. 25, 1885	Feb. 25, 1885
1848.	Union Mutual Life	Portland, Me.	F. E. Richards	J. Frank Lang	Howard Perrin	Sept. 11, 1868	Sept. 11, 1868
1860.	Washington Life	New York	W. A. Brewster, Jr.	G. H. Brewer	G. F. Wink	Feb. 5, 1881	Feb. 5, 1881
1879.	Bankers Life Association	Des Moines	E. A. Temple	A. C. Sulson	J. C. Brusie	July 10, 1891	July 10, 1891
1888.	Decimul Mutual Life	San Francisco	H. H. Busch	W. S. Pardy	F. B. Lloyd	Nov. 10, 1898	Nov. 10, 1898
1885.	Fidelity Mutual Aid Ass'n	San Francisco	C. W. Nevlin	J. L. M. Shetterley	G. J. Sternsdorff	May 13, 1891	May 13, 1891
1897.	Etna Indemnity	Hartford	C. N. Lindley	E. S. Pegram	Harry W. Lobb	Aug. 24, 1898	Aug. 24, 1898
1895.	American Bonding	Baltimore	Jas. Bond	S. H. Shriver	J. C. Hayburn	Feb. 6, 1900	Feb. 6, 1900
1893.	American Credit Indemnity	New York	S. M. Phelan	H. B. Zevely	W. H. Betts	Feb. 15, 1897	Feb. 15, 1897
1884.	American Surety	New York	H. D. Lyman	C. M. Keeney	C. J. O'Kell	Dec. 5, 1884	Dec. 5, 1884
1886.	California Title Ins. & Trust	San Francisco	H. L. Davis	Jas. F. Lynd	E. D. Nardin	Mar. 11, 1887	Mar. 11, 1887
1886.	City Trust, Safe Deposit, & S'ty	Philadelphia	C. M. Swain	A. A. Smith	Voss, Conrad & Co.	June 9, 1896	June 9, 1896
1897.	Continental Casualty	Hammond, Ind.	C. H. Brunker	A. A. Smith	Mann & Wilson	Mar. 14, 1902	Mar. 14, 1902
1880.	Employers Liability	London	G. Appleton, U. S. Manager	R. H. Hillias	C. Christensen	June 20, 1887	June 20, 1887
1876.	Fidelity and Casualty	New York	S. T. Seward	H. Nicodemus	E. C. Landis	Mar. 4, 1881	Mar. 4, 1881
1890.	Fidelity and Deposit	Baltimore	E. Warfield	J. B. Pierce	Wm. H. Kern	June 25, 1894	June 25, 1894
1865.	Frankfort Mar. Acct. & Plate Gl.	Frankfort, Ger.	F. G. Voss, U. S. Manager	C. E. W. Chambers	Jas. H. Borsland	Nov. 26, 1890	Nov. 26, 1890
1866.	Hartford Steam Boiler	Hartford	F. M. Allen	S. W. Burton	C. B. Sloan	Nov. 6, 1884	Nov. 6, 1884
1882.	Lloyds Plate Glass	New York	A. W. Woods	B. McCall	Sidney A. Loth	Dec. 6, 1887	Dec. 6, 1887
1869.	London Guarantee and Acc'd't	London	A. W. Masters, U. S. Manager	W. E. Thomsen	Thos. Godwin	Oct. 17, 1892	Oct. 17, 1892
1898.	Maryland Casualty	Baltimore	John T. Stone	S. W. Moore	C. F. Briggs	Dec. 6, 1898	Dec. 6, 1898
1874.	Metropolitan Plate Glass	New York	E. H. Winslow	G. E. Taylor	T. M. Morgan	May 8, 1879	May 8, 1879
1897.	National Surety	New York	Chas. A. Dean	M. A. White	Robertson & Hall	July 20, 1894	July 20, 1894
1899.	New Amsterdam Casualty	New York	W. F. Moore	A. E. Forrest	June 10, 1897	Oct. 2, 1899	Oct. 2, 1899
1891.	New York Plate Glass	New York	M. Danziger	E. E. Crepin	Aug. 4, 1885	May 6, 1891	May 6, 1891
1886.	North American Accident	Chicago	E. E. Crepin	Oscar Ising, U. S. Manager	Nov. 22, 1902	July 6, 1901	July 6, 1901
1895.	Ocean Accident and Guarantee	London	E. F. Green	F. A. Zane	Nov. 22, 1902	Dec. 22, 1898	Dec. 22, 1898
1902.	Pacific Coast Casualty	San Francisco	Wallace Everson	K. C. Atwood	Aug. 4, 1885	Nov. 22, 1902	Nov. 22, 1902
1885.	Pacific Surety	San Francisco	P. C. Lounsberry	E. C. Leonard	Nov. 12, 1893	Aug. 4, 1885	Aug. 4, 1885
1893.	Preferred Accident	New York	D. M. Ferry	H. B. Montague	Nov. 12, 1893	June 12, 1893	June 12, 1893
1884.	Standard Life and Accident	Detroit	O. A. Rouleau	G. P. Clark	July 31, 1902	Nov. 12, 1894	Nov. 12, 1894
1902.	Title Insurance and Guaranty	San Francisco	W. H. Allen, Jr.	L. L. Atwood	July 31, 1902	Nov. 25, 1895	Nov. 25, 1895
1893.	Title Insurance and Trust	Los Angeles	Edw. Cluff	G. R. Callis	Sept. 2, 1893	Sept. 2, 1893	Sept. 2, 1893
1892.	Union Casualty and Surety	St. Louis	J. R. Bland		June 10, 1897	June 10, 1897	June 10, 1897
1896.	U. S. Fidelity and Guaranty	Baltimore					

TABLE No. 21.—Summary of Assets, Liabilities, Incomes, Expenditures, etc., of Fire and Marine Insurance Companies doing business in California on December 31, 1902.—California Companies.

Name.	Location.	Cash Capital Paid Up.	Assets.	Liabilities, Capital not Included.	Incomes.	Expenditures.	Losses Incurred during the Year.	Net Surplus.
Fireman's Fund Home Fire and Marine.	San Francisco	\$1,000,000 00	\$5,158,649 45	\$2,401,865 78	\$3,983,866 73	\$2,790,234 31	\$1,570,553 20	\$1,756,783 67
	San Francisco	300,000 00	1,359,239 87	692,586 02	1,174,812 67	827,190 56	420,310 78	366,653 85
Totals		\$1,300,000 00	\$6,517,889 32	\$3,094,451 80	\$5,158,679 40	\$3,617,424 87	\$1,990,863 98	\$2,123,437 52

TABLE No. 22.—Showing the various items composing the Assets of Fire and Marine Insurance Companies doing business in California on December 31, 1902.—California Companies.

Name.	Location.	Real Estate.	Mortgage Loans.	Stocks and Bonds Owned.	Collateral Loans.	Cash in Office and Banks.	Interest Due and Accrued.	Premiums in Course of Collection.	Bills Receivable, Not Matured, Taken for Marine Risks	All Other Assets.	Total Assets.
Fireman's Fund.	San Fran.	\$25,500 00	\$245,167 31	\$3,067,979 50	\$281,500 00	\$335,645 47	\$2,897 40	\$613,443 75	\$58,579 70	\$27,936 32	\$5,158,649 45
Home Fire and Marine.	San Fran.	120,975 00	147,585 00	852,241 00	-----	82,120 04	1,313 55	144,713 29	7,358 50	2,933 49	1,359,239 87
Totals		\$646,475 00	\$392,752 31	\$3,920,220 50	\$281,500 00	\$417,765 51	\$4,210 95	\$758,157 04	\$65,938 20	\$30,869 81	\$6,517,889 32

TABLE No. 23.—Showing the various items composing the Liabilities, except Capital Stock, of Fire and Marine Insurance Companies doing business in California on December 31, 1902.—California Companies.

Name.	Location.	Losses Adjusted.	Losses Unadjusted.	Losses Resisted.	Fire Reinsurance.	Marine Reinsurance.	All Other Claims.	Total Liabilities.	Net Surplus.
Fireman's Fund.	San Francisco	\$34,709 71	\$136,606 52	\$21,175 00	\$1,948,585 36	\$132,568 82	\$128,220 37	\$2,401,865 78	\$1,756,783 67
Home Fire and Marine.	San Francisco	9,010 41	31,088 43	6,350 00	593,166 24	21,572 73	31,298 21	692,586 02	366,653 85
Totals		\$43,720 12	\$167,694 95	\$27,525 00	\$2,541,751 60	\$154,241 55	\$159,518 58	\$3,094,451 80	\$2,123,437 52

TABLE No. 24.—Showing the various items composing the Incomes of Fire and Fire and Marine Insurance Companies doing business in California on December 31, 1902—California Companies.

Name.	Location.	Fire Premiums.	Marine Premiums.	Interest on Mortgages.	Interest from Other Sources.	Rents.	All Other Sources.	Total Income.
Fireman's Fund	San Francisco ..	\$2,660,277 86	\$406,306 38	\$19,251 97	\$149,723 34	\$29,686 21	\$658,620 97	\$3,983,866 73
Home Fire and Marine	San Francisco ..	865,412 72	69,194 49	14,064 55	31,396 17	3,509 10	191,235 64	1,174,812 67
Totals .....	.....	\$3,525,690 58	\$535,500 87	\$33,316 52	\$181,119 51	\$33,195 31	\$849,856 61	\$5,158,679 40

TABLE No. 25.—Showing the various items composing the Expenditures of Fire and Fire and Marine Insurance Companies doing business in California on December 31, 1902—California Companies.

Name.	Location.	Fire Losses.	Marine Losses.	Dividends.	Commissions and Brokerage.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures.
Fireman's Fund	San Francisco ..	\$1,292,270 69	\$297,873 04	\$120,000 00	\$481,281 55	\$258,139 32	\$69,383 49	\$271,286 22	\$2,790,234 31
Home Fire and Marine	San Francisco ..	361,532 26	45,034 72	36,000 00	205,922 74	107,850 23	19,051 48	51,799 13	827,190 56
Totals .....	.....	\$1,653,802 95	\$342,907 76	\$156,000 00	\$687,204 29	\$365,989 55	\$88,434 97	\$323,085 35	\$3,617,424 87

TABLE No. 26.—Showing amount of Risks Written, Premiums Received, and amount of Risks in Force on December 31, 1902, with Premiums thereon, of Fire and Fire and Marine Insurance Companies doing business in California—California Companies.

Name.	Location.	RISKS WRITTEN DURING THE YEAR.				RISKS IN FORCE DECEMBER 31, 1902.			
		Fire.	Premiums.	Marine.	Premiums.	Fire.	Premiums.	Marine.	Premiums.
Fireman's Fund	San Francisco ..	\$314,575,036 00	\$3,764,215 13	\$141,028,820 00	\$1,049,745 48	.....	.....	.....	.....
Home Fire and Marine	San Francisco ..	85,002,088 00	1,216,786 91	9,215,049 00	87,792 07	.....	.....	.....	.....
Totals .....	.....	\$399,577,124 00	\$4,981,002 04	\$150,243,869 00	\$1,137,537 55	.....	.....	.....	.....
Name.	Location.	RISKS IN FORCE DECEMBER 31, 1902.				RISKS IN FORCE DECEMBER 31, 1902.			
		Fire.	Premiums.	Marine.	Premiums.	Fire.	Premiums.	Marine.	Premiums.
Fireman's Fund	San Francisco ..	\$297,931,977 00	\$3,677,525 21	\$8,189,911 00	\$232,853 46	.....	.....	.....	.....
Home Fire and Marine	San Francisco ..	81,896,950 00	1,117,734 29	848,984 00	41,107 54	.....	.....	.....	.....
Totals .....	.....	\$379,828,927 00	\$4,795,259 50	\$9,038,895 00	\$273,961 00	.....	.....	.....	.....

REPORT OF THE FIRE AND MARINE INSURANCE COMMISSIONER.

TABLE NO. 27.

Summary of Assets, Liabilities, Incomes, Expenditures, etc., and amount of Surplus over Capital Stock, of Fire and Marine Insurance Companies doing business in California on December 31, 1902—Companies of other States.

Name.	Location.	Cash Capital Paid Up.	Assets.	Liabilities, Capital Not Included.	Incomes.	Expenditures.	Losses Incurred During the Year.	Net Surplus.
Etna.....	Hartford	\$4,000,000 00	\$14,949,520 98	\$5,031,358 95	\$5,919,950 69	\$5,093,846 80	\$2,702,198 74	\$5,918,162 03
Agricultural.....	Watertown, N. Y.	500,000 00	2,566,266 72	1,449,189 10	1,462,856 56	1,262,652 09	648,248 00	617,077 68
American.....	Newark	600,000 00	4,455,064 08	1,971,964 54	2,201,680 70	1,472,339 88	817,914 92	1,883,099 48
American.....	Boston	300,000 00	859,035 84	331,771 49	454,091 46	375,783 54	201,939 98	127,264 35
American Central.....	St. Louis	1,000,000 00	3,572,673 62	1,235,515 81	1,605,514 42	1,343,511 14	702,530 76	1,337,157 81
American Fire.....	Philadelphia	500,000 00	2,534,984 64	1,855,163 21	1,832,878 77	1,507,268 57	852,790 95	179,821 43
Assurance Co. of America.....	New York	200,000 00	608,394 91	317,816 83	456,205 58	409,869 31	282,624 21	90,578 08
Caledonian-American.....	New York	200,000 00	308,383 25	19,645 77	23,607 62	28,784 58	8,200 15	88,737 48
Citizens.....	St. Louis	200,000 00	640,346 16	326,782 72	486,936 90	362,668 36	211,096 20	113,563 44
Commercial Union Fire.....	New York	200,000 00	394,481 24	143,808 06	187,740 27	132,702 72	78,857 70	50,673 18
Connecticut Fire.....	Hartford	1,000,000 00	4,734,791 83	2,532,156 08	2,873,099 50	2,505,559 60	1,363,557 50	1,202,635 75
Continental.....	New York	1,000,000 00	12,962,130 72	6,243,168 74	6,547,591 52	4,956,465 92	2,700,654 17	5,718,961 98
Delaware.....	New York	702,875 00	1,651,354 71	818,290 87	924,580 09	717,340 63	397,187 11	130,188 84
Dutchess.....	Philadelpha	200,000 00	741,619 37	435,421 86	503,830 60	421,003 36	239,838 36	106,197 51
Equitable Fire and Marine.....	Poughkeepsie	400,000 00	1,171,774 20	620,135 58	771,663 94	638,343 94	377,480 10	151,638 71
Fire Association.....	Providence, R. I.	500,000 00	1,150,823 39	4,975,893 62	3,812,370 13	3,563,940 04	2,048,003 63	674,929 77
Firemen's.....	Philadelphia	500,000 00	1,230,568 24	418,218 53	524,364 93	722,160 02	407,499 43	412,349 71
Franklin Fire.....	Baltimore	400,000 00	3,092,378 97	1,671,315 24	767,094 66	722,572 21	363,961 79	1,021,063 73
German.....	Philadelphia	400,000 00	4,429,360 34	2,975,450 21	2,813,405 98	2,566,017 27	1,349,480 42	1,253,910 13
German Alliance.....	Freeport, Ill.	200,000 00	1,244,810 53	381,246 19	438,195 04	352,407 26	198,845 28	463,564 34
German-American.....	New York	400,000 00	10,319,176 76	4,623,295 88	4,698,836 32	3,851,494 31	2,069,909 57	4,695,880 88
German Fire.....	New York	200,000 00	568,360 72	171,939 30	211,640 19	151,207 51	74,400 00	196,421 42
Germania Fire.....	Peoria, Ill.	1,000,000 00	5,643,477 70	2,100,594 00	2,021,001 90	1,782,046 69	977,519 65	2,542,883 70
Glens Falls.....	New York	200,000 00	3,825,468 87	1,272,575 13	1,336,027 99	1,003,106 07	492,197 00	2,352,883 74
Globe and Rutgers Fire.....	Glens Falls, N. Y.	400,000 00	1,410,101 60	806,996 79	967,906 99	617,275 10	404,710 65	203,104 81
Greenwich.....	New York	200,000 00	2,174,546 53	1,840,376 58	2,236,815 08	1,921,021 28	1,055,206 46	134,169 95
Hanover Fire.....	New York	200,000 00	3,795,167 35	2,148,514 80	2,438,819 86	2,012,903 57	1,174,143 68	646,682 55
Hartford Fire.....	New York	1,250,000 00	13,443,560 37	9,012,406 64	10,028,259 21	9,251,642 04	5,198,098 68	3,181,153 73
Home.....	Hartford	3,000,000 00	17,108,635 12	7,746,758 43	7,728,241 42	6,387,855 86	3,606,345 70	6,381,876 69
Indemnity Fire.....	New York	200,000 00	429,096 80	168,595 93	226,984 73	179,248 36	100,808 38	60,500 87
Insurance Co. of N. America.....	New York	3,000,000 00	10,664,183 50	5,713,994 56	7,415,718 17	6,448,084 38	3,867,772 96	1,950,188 94
Kings County Fire.....	Philadelpha	200,000 00	435,532 82	130,341 24	185,128 93	143,015 96	70,215 58	105,191 58
Mercantile Fire and Marine.....	New York	400,000 00	874,256 47	411,388 33	513,965 70	430,258 12	246,758 64	62,868 14
Michigan Fire and Marine.....	Boston	400,000 00	856,702 11	313,362 37	456,151 74	391,318 89	178,234 58	142,339 74
	Detroit.....	400,000 00						

Milwaukee Mechanics	200,000 00	2,717,214 49	1,249,554 10	1,349,878 56	1,228,797 65	599,806 23	1,267,660 39
National Fire	1,000,000 00	6,205,393 71	3,654,590 97	4,549,933 23	3,789,971 06	2,154,399 83	1,550,802 74
National Standard	200,000 00	634,121 04	374,510 85	447,986 18	415,579 21	282,500 90	109,610 69
National Union Fire	750,000 00	1,464,072 50	390,488 48	930,604 56	357,566 53	200,938 91	323,584 02
New Hampshire Fire	1,000,000 00	3,779,569 67	1,624,759 57	1,788,722 89	1,609,790 88	852,478 51	1,154,810 10
New York Fire	1,200,000 00	459,219 89	192,873 76	281,260 11	258,559 90	137,827 31	66,346 13
Niagara Fire	500,000 00	3,697,735 51	2,090,667 39	2,448,338 05	2,125,170 80	1,156,735 76	1,107,068 12
North German Fire	200,000 00	389,019 76	168,045 92	239,271 34	216,218 89	129,300 94	20,973 84
Northwestern National	600,000 00	3,389,445 87	1,719,232 82	1,401,448 25	1,162,489 30	437,479 77	1,070,213 05
Orient	500,000 00	2,108,328 12	964,232 90	1,060,879 13	1,190,630 17	588,465 08	644,095 22
Pelican	200,000 00	461,343 98	187,694 85	291,242 25	225,096 73	138,984 00	73,649 13
Pennsylvania Fire	400,000 00	5,797,583 91	3,200,485 82	2,727,680 45	2,320,029 65	1,346,656 30	2,197,098 09
Phoenix	1,000,000 00	7,578,631 19	4,820,476 31	5,816,996 42	5,433,397 43	3,222,116 21	1,758,154 88
Phoenix	2,000,000 00	6,497,612 14	3,159,688 91	3,715,370 23	3,363,162 10	1,808,067 00	1,337,923 23
Providence-Washington	500,000 00	2,406,716 19	1,467,987 53	1,892,168 26	1,732,403 04	1,057,546 92	438,728 06
Queen	500,000 00	5,725,775 84	2,690,222 36	3,228,422 55	2,679,037 58	1,551,052 79	2,535,553 48
Rochester German	200,000 00	1,461,993 63	770,903 08	914,257 07	783,597 28	455,446 22	491,090 55
Springfield Fire and Marine	2,000,000 00	6,154,391 84	2,642,321 34	3,102,695 63	2,991,227 72	1,669,163 02	1,512,070 50
St. Paul Fire and Marine	500,000 00	3,322,901 64	2,014,475 78	2,807,851 86	2,486,965 02	1,483,211 06	808,425 86
Teutonia	250,000 00	734,027 07	397,110 73	646,544 16	645,038 86	399,745 06	86,916 34
Traders	500,000 00	2,690,661 18	1,115,724 31	1,396,309 89	1,227,360 99	676,801 65	1,074,936 87
Union	200,000 00	582,431 48	342,142 16	376,438 85	336,814 31	191,200 60	40,289 32
United Firemen's	300,000 00	1,745,093 61	1,278,051 42	701,457 23	493,019 98	235,389 86	167,042 19
Victoria Fire	200,000 00	318,242 82	81,721 70	198,221 86	121,174 57	53,795 27	36,521 12
Westchester Fire	300,000 00	3,300,598 66	1,785,379 33	2,350,536 61	2,003,095 76	1,114,465 64	1,215,219 33
Williamsburg City Fire	250,000 00	2,390,737 49	879,600 84	999,505 28	912,752 09	469,725 18	1,261,136 65
Totals	\$39,802,875 00	\$215,858,893 78	109,528,396 11	120,777,378 35	103,834,722 92	\$57,882,530 35	\$66,527,622 67

TABLE No. 28.

Showing the various items composing the Assets of Fire and Marine Insurance Companies doing business in California on December 31, 1902—
Companies of other States.

Name.	Location.	Real Estate.	Loans on Bonds and Mortgages.	Stocks and Bonds Owned by the Company.	Collateral Loans.	Cash in Office and in Banks.
Etna.....	Hartford	\$130,000 00	\$12,600 00	\$12,877,380 47		\$1,286,673 92
Agricultural.....	Watertown, N. Y.	344,505 00	584,715 07	885,189 25	\$321,202 46	193,566 97
American.....	Newark	323,000 00	1,587,279 73	2,079,900 00		62,769 18
American.....	Boston			677,988 00		40,447 08
American Central.....	St. Louis	61,166 66		2,866,050 00	310,000 00	139,393 60
American Fire.....	Philadelphia	392,241 74	820,475 55	767,661 50	247,700 00	69,189 70
Assurance Company of America.....	New York			454,277 50		76,824 47
Caledonian-American.....	New York			293,100 00		1,552 52
Citizens.....	St. Louis	4,877 00	216,865 00	181,375 00		102,798 30
Commercial Union Fire.....	New York			321,041 50		33,542 85
Connecticut Fire.....	Hartford	146,950 00	1,345,950 00	2,720,699 00		282,165 92
Continental.....	New York	1,105,000 00	44,810 00	10,009,520 00	922,344 94	92,344 94
Delaware.....	Philadelphia	200,500 00	116,700 00	871,002 84	225,000 00	60,820 40
Dutchess.....	Poughkeepsie	19,000 00	21,000 00	539,045 00	1,000 00	92,858 07
Equitable Fire and Marine.....	Providence, R. I.	120,000 00	149,850 00	605,880 00	115,000 00	50,064 44
Fire Association.....	Philadelphia	443,457 50	1,358,506 99	3,096,286 25	216,825 00	235,369 38
Firemen's.....	Baltimore	145,000 00		926,920 00		43,494 99
Franklin Fire.....	Philadelphia	238,200 00	101,898 00	2,471,423 00	105,000 00	72,901 93
German.....	Freeport, Ill.	97,163 25	2,054,309 96	1,393,424 01	7,700 00	349,520 43
German Alliance.....	New York			1,112,347 00		29,069 77
German-American.....	New York	15,000 00	13,000 00	8,667,826 00		685,011 40
German Fire.....	Peoria, Ill.	7,000 00	241,792 02	119,815 00	67,818 55	90,141 70
Germania Fire.....	New York	667,324 27	353,000 00	4,016,203 00		249,969 59
Glens Falls.....	Glens Falls, N. Y.	104,405 43	1,059,591 33	2,084,160 00	4,000 00	416,387 52
Globe and Rutgers Fire.....	New York	73,000 00	54,500 00	880,579 00	5,000 00	58,862 54
Greenwich.....	New York			1,621,535 00		126,919 10
Hanover Fire.....	New York	450,000 00	3,500 00	2,537,812 62	500 00	329,295 28
Hartford Fire.....	Hartford	950,500 00	781,869 00	8,853,912 17	4,800 00	815,948 22
Home.....	New York	1,593,892 06	112,750 00	13,434,230 00		972,574 33
Indemnity Fire.....	New York			382,580 00		16,427 43
Insurance Company of North America.....	Philadelphia	725,500 00	1,130,997 29	5,791,750 00	821,400 00	1,157,412 94
Kings County Fire.....	New York	67,500 00	200,100 00	320,040 00		12,050 39
Mercantile Fire and Marine.....	Boston			511,722 00	12,000 00	43,800 75
Michigan Fire and Marine.....	Detroit	90,030 01	567,722 00	60,250 00		73,263 51

Milwaukee Mechanics	Milwaukee	64,000 00	1,217,830 80	1,171,553 75	1,217,553 75	60,422 97
National Fire	Hartford	373,690 78	580,465 00	4,277,382 00	4,277,382 00	431,637 89
National Standard	New York			442,077 50		104,927 26
National Union Fire	Pittsburg	8,000 00	227,247 00	934,287 50	50,000 00	149,325 81
New Hampshire Fire	Manchester	172,937 58	467,533 33	2,540,420 00	120,000 00	231,840 87
New York Fire	New York	120,000 00		274,400 00		23,756 50
Niagara Fire	New York		344,000 00	2,754,550 00		169,437 04
North German Fire	New York		36,000 00	267,683 00		26,228 20
Northwestern National	Milwaukee		955,656 67	2,025,590 00		157,190 93
Orient	Hartford	74,652 31	42,250 00	1,537,922 07		220,453 39
Pelican	New York			388,490 39		36,057 52
Pennsylvania Fire	Philadelphia	219,500 00	727,916 66	3,820,319 00	472,200 00	132,144 84
Phoenix	Brooklyn	568,000 00	64,600 00	5,373,519 00	107,500 00	536,508 38
Phoenix	Hartford	415,696 32	88,036 75	4,839,240 25	34,000 00	343,430 57
Providence-Washington	Providence, R. I.			1,889,860 00		178,492 03
Queen	New York		60,000 00	4,909,172 03		166,371 19
Rochester German	Rochester, N. Y.	211,498 03	370,577 71	547,150 00		168,167 76
Springfield Fire and Marine	Springfield, Mass.	227,500 00	553,650 00	4,351,150 00	21,375 00	321,014 06
St. Paul Fire and Marine	St. Paul	538,174 66	403,922 11	1,877,391 75	50,580 94	206,412 98
Teutonia	New Orleans	40,000 00		553,800 00		43,433 19
Traders	Chicago	31,993 84	102,000 00	2,137,004 40	13,400 00	206,987 23
Union	Philadelphia	160,000 00	1,000 00	320,972 50	2,000 00	25,623 35
United Firemen's	Philadelphia	205,700 00	387,922 00	864,636 00	137,000 00	61,532 97
Victoria Fire	New York			303,700 00		4,878 90
Westchester Fire	New York	265,350 00	439,747 50	2,112,950 00		185,268 08
Williamsburg City Fire	Brooklyn	669,657 77	253,600 00	1,179,840 00	26,700 00	104,566 89
Totals		\$12,881,564 21	\$20,257,737 47	\$146,126,986 25	\$3,499,701 95	\$13,509,584 36

TABLE No. 23.—CONTINUED.

Name.	Location.	Interest Due and Accrued.	Premiums in Collection.	Bills Receivable, Not Matured, Taken for Fire, Marine, and Inland Risks.	All Other Assets.	Total Assets.
Etna.....	Hartford	\$571 00	\$642,295 59	-----	-----	\$14,949,520 98
Agricultural.....	Watertown, N. Y.	25,126 04	208,025 14	-----	\$3,936 85	2,566,266 78
American.....	Newark	53,631 03	223,285 96	\$124,399 83	808 29	4,455,064 02
American.....	Boston	4,485 35	135,315 41	-----	800 00	859,035 84
American Central.....	St. Louis	-----	196,063 36	-----	-----	3,572,673 62
American Fire.....	Philadelphia	14,610 20	197,136 44	-----	25,969 51	2,534,984 64
Assurance Company of America.....	New York	1,629 82	75,663 12	-----	-----	608,394 91
Caledonian-American.....	New York	1,345 83	11,698 31	-----	686 59	308,383 25
Citizens.....	St. Louis	5,072 00	199,358 86	-----	-----	640,346 16
Commercial Union Fire.....	New York	1,113 75	38,783 14	-----	-----	394,481 24
Connecticut Fire.....	Hartford	-----	234,672 03	4,454 88	-----	4,734,791 83
Continental.....	New York	70,644 37	726,811 69	77,180 15	5,819 57	12,962,130 72
Delaware.....	Philadelphia	13,603 03	159,793 51	2,791 66	1,143 27	1,631,354 71
Dutchess.....	Poughkeepsie	2,757 05	65,389 25	-----	570 00	741,619 37
Equitable Fire and Marine.....	Providence, R. I.	-----	129,234 80	780 05	965 00	1,171,774 29
Fire Association.....	Philadelphia	57,128 39	724,645 52	-----	18,604 36	6,150,823 39
Firemen's.....	Baltimore	15,366 87	94,576 89	-----	5,209 49	1,230,568 24
Franklin Fire.....	Philadelphia	2,107 67	100,848 37	-----	-----	3,092,378 97
German.....	Freeport, Ill.	73,877 00	403,195 59	50,170 10	-----	4,429,360 34
German Alliance.....	New York	-----	103,393 76	-----	-----	1,244,810 53
German-American.....	New York	38,845 98	899,493 38	-----	-----	10,319,176 76
German Fire.....	Peoria, Ill.	9,070 09	32,698 36	-----	25 00	568,360 72
Germania Fire.....	New York	8,273 75	320,648 29	-----	28,058 80	5,643,477 70
Glens Falls.....	Glens Falls, N. Y.	9,949 85	146,824 74	-----	150 00	3,825,468 87
Globe and Rutgers Fire.....	New York	6,242 28	331,517 78	-----	400 00	1,410,101 60
Greenwich.....	New York	2,400 00	390,858 69	8,681 19	24,152 55	2,174,546 53
Hanover Fire.....	New York	16,995 58	434,064 14	-----	22,999 73	3,795,167 35
Hartford Fire.....	Hartford	10,507 40	1,989,742 87	-----	36,280 71	13,443,560 37
Home.....	New York	9,315 79	985,872 94	-----	-----	17,108,635 12
Indemnity Fire.....	New York	2,650 00	27,155 72	-----	283 65	429,096 80
Insurance Company of North America.....	Philadelphia	7,627 30	986,582 44	38,059 10	4,854 43	10,664,183 50
Kings County Fire.....	New York	1,091 23	31,505 54	-----	345 66	435,532 82
Mercantile Fire and Marine.....	Boston	5,764 19	100,869 53	-----	-----	874,256 47
Michigan Fire and Marine.....	Detroit	11,391 18	53,045 41	-----	-----	855,702 11
Milwaukee Mechanics.....	Milwaukee	30,183 63	173,223 34	-----	-----	2,717,214 49
National Fire.....	Hartford	-----	542,218 04	-----	-----	6,205,393 71

National Standard	New York	1,546 66	85,569 62	634,121 04
National Union Fire	Pittsburg	9,238 47	85,701 85	1,464,072 50
New Hampshire Fire	Manchester		223,377 42	3,779,569 67
New York Fire	New York		41,063 39	459,219 89
Niagara Fire	New York	10,229 60	419,468 87	3,697,735 51
North German Fire	New York	2,013 07	57,046 94	389,019 76
Northwestern National	Milwaukee	14,906 39	236,101 88	3,389,445 87
Orient	Hartford	25,222 47	197,514 33	2,108,328 12
Pelican	New York	3,339 03	33,442 39	461,343 98
Pennsylvania Fire	Philadelphia	9,817 14	415,686 27	5,797,583 91
Phoenix	Brooklyn	5,364 97	918,763 89	7,578,631 19
Phoenix	Hartford	37,425 77	732,613 13	6,497,612 14
Providence-Washington	Providence, R. I.	9,936 76	290,886 29	2,406,716 19
Queen	New York	64,247 99	525,887 37	5,725,775 84
Rochester German	Rochester, N. Y.	10,982 41	153,617 72	1,461,993 63
Springfield Fire and Marine	Springfield, Mass.	44,297 28	634,893 91	6,154,391 84
St. Paul Fire and Marine	St. Paul		217,256 78	3,322,901 64
Teutonia	New Orleans		96,793 88	734,027 07
Traders	Chicago	8,450 21	174,976 98	2,690,661 18
Union	Philadelphia		69,056 32	582,431 48
United Firemen's	Philadelphia	8,115 18	75,532 19	1,745,093 61
Victoria Fire	New York	2,576 36	7,087 56	318,242 82
Westchester Fire	New York	17,280 70	280,002 38	3,300,598 66
Williamsburg City Fire	Brooklyn	8,161 71	142,388 46	2,390,737 49
Totals		\$806,529 82	\$18,164,237 77	\$215,858,893 78

TABLE No. 29.

Showing the various items composing the Liabilities, except Capital Stock, of Fire and Fire and Marine Insurance Companies doing business in California on December 31, 1902—Companies of other States.

Name.	Location.	Losses Adjusted.	Losses Unadjusted.	Losses Resisted.	Fire Reinsurance.	Marine Reinsurance.	All Other Claims.	Total Liabilities.	Net Surplus.
Aetna	Hartford	\$89,918 54	\$425,290 38	\$31,926 50	\$4,023,401 84	\$208,882 67	\$251,939 02	\$5,031,358 95	\$5,918,162 03
Agricultural	Watertown, N.Y.	41,904 17	62,951 32	12,821 32	1,273,453 41	-----	58,058 26	1,449,189 50	617,077 68
American	Newark	3,703 79	86,560 04	6,060 00	1,816,321 88	-----	59,319 45	1,971,964 54	1,883,099 48
American	Boston	12,582 98	35,618 70	-----	320,574 47	-----	62,995 49	431,771 49	127,264 35
American Central	St. Louis	42,644 51	63,317 47	21,148 15	1,078,996 18	-----	29,409 50	1,235,515 81	1,337,157 81
American Fire	Philadelphia	35,123 44	87,543 60	21,715 78	1,677,585 05	-----	33,195 34	1,855,163 21	179,821 43
Assurance Company of America	New York	-----	48,745 00	850 00	235,430 86	-----	32,790 97	317,816 83	90,378 08
Caledonian-American	New York	-----	2,172 02	750 00	8,706 14	-----	8,017 61	19,645 77	88,737 48
Citizens	St. Louis	15,003 68	11,039 38	6,021 77	265,172 27	-----	29,545 62	326,782 72	113,563 44
Commercial Union Fire	New York	3,880 40	16,784 60	3,000 00	106,951 83	-----	13,191 23	143,808 06	50,673 18
Connecticut Fire	Hartford	56,561 36	145,028 63	29,380 48	2,301,185 61	-----	-----	2,532,156 08	1,202,635 75
Continental	New York	-----	363,915 78	57,884 00	5,320,070 68	-----	501,298 28	6,243,168 74	5,718,961 98
Delaware	Philadelphia	1,975 00	49,565 00	3,780 00	735,325 48	-----	27,645 39	818,290 87	130,188 84
Dutchess	Poughkeepsie.	8,668 72	26,632 36	1,000 00	372,947 27	-----	26,173 51	435,421 86	106,197 51
Equitable Fire and Marine	Providence, R. I.	6,359 27	68,726 73	9,019 00	506,471 97	8,321 82	21,236 79	620,135 58	151,638 71
Fire Association	Philadelphia	143,616 73	124,757 31	44,836 83	4,470,077 07	-----	192,005 68	4,975,893 62	674,929 77
Firemen's	Baltimore	5,824 63	21,340 00	-----	288,819 65	-----	102,234 25	418,218 53	412,349 71
Franklin Fire	Philadelphia	17,398 31	37,636 92	6,925 00	1,581,970 79	-----	24,384 22	1,671,315 24	1,021,063 73
German	Freeport, Ill.	70,589 76	64,778 67	16,300 00	2,673,620 10	-----	150,161 68	2,975,450 21	1,253,910 13
German Alliance	New York	21,154 75	42,069 00	-----	287,383 76	-----	30,638 38	381,246 19	463,564 34
German-American	New York	69,363 00	349,649 68	94,230 00	3,715,225 74	-----	394,827 46	4,623,295 88	4,695,880 88
German Fire	Peoria, Ill.	3,493 29	8,300 00	-----	160,146 01	-----	-----	171,939 30	196,421 42
Germania Fire	New York	65,938 68	42,124 46	15,590 00	1,927,600 83	-----	49,340 03	2,100,594 00	2,542,883 70
Glens Falls	Glens Falls, N.Y.	15,983 52	27,322 85	16,677 00	1,172,061 55	-----	40,530 21	1,272,575 13	2,352,893 74
Globe and Rutgers Fire	New York	24,906 98	59,102 59	1,200 00	601,859 57	-----	119,927 65	806,996 79	203,104 81
Greenwich	New York	-----	194,144 97	30,592 00	1,365,097 49	-----	147,442 18	1,840,376 58	1,341,669 95
Hanover Fire	New York	103,135 32	130,765 34	44,388 30	1,738,146 24	103,099 94	132,079 60	2,148,514 80	646,652 55
Hartford Fire	Hartford	207,763 21	506,493 16	113,549 03	7,812,840 94	-----	371,760 30	9,012,406 64	3,181,153 73
Home	New York	110,740 38	571,241 60	75,132 50	5,743,909 00	-----	928,608 95	7,746,758 43	6,361,876 69
Indemnity Fire	New York	8,737 36	11,473 95	2,845 00	136,865 50	-----	8,674 12	168,595 93	60,500 87
Insurance Company of North America	Philadelphia	118,669 27	569,612 70	49,718 03	4,506,833 10	362,119 00	107,042 46	5,713,994 56	1,950,188 94

	7 29	13,143 00	1,100 00	99,921 61	16,169 34	130,341 24	105,191 58
Kings County Fire--							
Mercantile Fire and							
Marine							
New York							
Boston		50,851 17	8,618 50	324,324 29	27,594 37	411,388 33	62,868 14
Detroit	4,467 95	6,806 00	12,100 00	284,412 97	5,575 45	313,362 37	142,339 74
Milwaukee	32,508 13	49,986 45	15,600 00	1,087,005 71	64,453 81	1,249,554 10	1,267,660 39
Hartford	71,262 35	276,271 53	25,896 45	3,231,160 64	50,000 00	3,654,590 97	1,550,802 74
New York		49,035 00	735 00	236,495 09	38,245 26	324,510 35	109,610 69
Pittsburg	25,314 20	26,377 62	3,500 00	312,173 52	23,123 14	390,488 48	323,384 02
National Union Fire	73,902 23	71,735 47	6,395 00	1,367,520 97	105,205 90	1,624,759 59	1,154,810 10
New Hampshire Fire							
New York Fire							
New York							
Niagara Fire	78,261 68	81,767 95	39,354 52	1,780,721 09	8,246 09	1,924,873 76	66,346 13
New York	1,953 64	18,316 73	1,750 00	1,32,944 20	110,562 15	2,090,667 39	1,107,068 12
North German Fire	4,883 28	47,548 62	6,000 00	1,573,607 59	13,081 35	1,68,045 92	20,973 84
Northwestern Nation'l							
Orient	28,021 00	58,728 46	24,195 50	809,688 66	43,599 28	1,719,232 82	1,070,213 05
Pelican	3,282 00	13,021 00	4,480 00	148,683 74	18,228 11	964,232 90	644,095 22
Pennsylvania Fire	14,609 03	160,181 99	11,670 00	3,014,024 80		187,694 85	73,649 13
Phoenix							
Brooklyn							
Hartford	57,828 00	311,599 93	27,001 67	2,635,214 31	263,666 40	3,200,485 82	2,197,098 09
Providence-Washing-							
ton							
Providence, R. I.	25,901 57	214,509 21	12,568 19	1,048,377 62	119,384 31	1,467,987 53	438,728 66
Queen	57,944 00	129,390 32	62,886 00	2,181,938 56	258,063 48	2,690,222 36	2,535,553 48
Rochester German	17,155 21	47,849 89	15,152 48	651,903 32	38,842 18	770,903 08	491,090 55
Springfield Fire and							
Marine	45,165 38	208,815 31	34,708 32	2,226,653 55	126,978 78	2,642,321 34	1,512,070 50
St. Paul Fire and Ma-							
rine							
St. Paul	62,268 97	146,733 01	17,712 07	1,613,008 57	174,753 16	2,014,475 78	808,425 86
Teutonia	40,385 50		2,000 00	334,050 23	20,675 00	397,110 73	86,916 34
Traders	44,477 42	61,037 31	7,641 15	960,807 82	41,760 61	1,115,724 31	1,074,936 87
Union	13,890 29	15,851 11	2,107 15	285,390 93	24,902 68	342,142 16	40,289 32
United Firemen's	10,174 71	17,463 04	9,222 88	1,202,879 33	38,311 46	1,278,051 42	167,042 19
Victoria Fire	857 79	6,160 67		73,658 00	1,045 24	81,721 70	36,521 12
New York	47,332 20	85,634 53	11,500 00	1,625,969 41	15,243 19	1,785,379 33	1,215,219 33
Westchester Fire							
Williamsburg City							
Fire	17,806 40	47,705 88	7,290 00	776,149 15	30,649 41	879,600 84	1,261,136 65
Totals	\$2,085,301 27	\$6,794,170 34	\$1,122,899 07	\$92,631,157 11	\$5,601,181 42	\$1,509,528,396, 11	\$86,527,622 67

TABLE No. 30.

Showing the various items composing the Incomes of Fire and Marine Insurance Companies doing business in California on December 31, 1902—Companies of other States.

Name.	Location.	Fire Premiums.	Marine Premiums.	Interest on Mortgage Loans.	Interest and Dividends From Other Sources.	Rents.	From All Other Sources.	Total Income.
Aetna.....	Hartford.....	\$5,017,318 76	\$338,286 50	\$636 00	\$510,782 07	\$4,346 00	\$48,581 36	\$5,519,950 69
Agricultural.....	Watertown, N.Y.....	1,221,705 42	---	37,471 82	54,674 01	4,592 58	144,411 73	1,462,856 56
American.....	Newark.....	1,606,380 15	---	83,355 38	65,752 58	12,121 78	434,070 81	2,201,680 70
American.....	Boston.....	419,255 87	---	---	23,129 69	---	11,705 90	454,091 46
American Central.....	St. Louis.....	1,478,734 69	---	3,005 82	123,773 91	---	---	1,606,514 42
American Fire.....	Philadelphia.....	1,587,416 33	---	42,156 56	33,515 31	9,558 38	180,232 19	1,852,878 77
Assurance Co. of America.....	New York.....	429,536 72	4 74	---	13,459 21	---	13,204 91	456,205 58
Caledonian-American.....	New York.....	7,188 94	---	---	9,180 65	---	7,238 03	23,607 62
Citizens.....	St. Louis.....	425,280 27	122 48	10,146 05	1,388 10	---	50,000 00	486,936 90
Commercial Union Fire.....	New York.....	178,811 30	---	---	8,928 97	---	---	187,740 27
Connecticut Fire.....	Hartford.....	2,693,204 28	---	62,066 26	103,007 55	5,874 50	8,946 91	2,873,099 50
Continental.....	New York.....	5,482,278 68	---	2,889 79	422,689 62	70,070 57	569,692 86	6,547,591 52
Delaware.....	Philadelphia.....	737,155 49	---	5,605 42	46,739 68	9,633 33	125,446 17	924,580 09
Dutchess.....	Poughkeepsie.....	473,497 70	---	1,660 31	18,862 17	1,062 00	8,748 42	503,830 60
Equitable Fire and Marine.....	Providence, R. I.....	714,651 38	20,984 97	7,944 18	26,491 89	1,591 52	---	771,663 94
Fire Association.....	Philadelphia.....	3,506,110 94	---	76,753 93	141,756 02	31,208 28	56,540 96	3,812,370 13
Firemen's.....	Baltimore.....	478,943 57	---	---	34,567 39	7,137 97	3,716 00	524,364 93
Franklin Fire.....	Philadelphia.....	643,948 52	---	6,863 20	109,223 84	5,836 60	1,222 50	767,094 66
German.....	Freeport, Ill.....	2,687,156 66	---	92,555 69	59,621 99	2,413 12	1,859 12	2,813,605 98
German Alliance.....	New York.....	392,964 61	---	---	43,732 68	---	1,497 75	438,195 04
German American.....	New York.....	4,347,839 20	---	520 00	346,090 37	4,866 75	---	4,698,836 32
German Fire.....	Peoria, Ill.....	186,112 09	---	18,310 00	3,000 10	480 00	3,738 00	211,640 19
Germania Fire.....	New York.....	1,824,367 49	---	18,159 54	162,895 15	---	15,579 72	2,021,001 90
Glens Falls.....	Glens Falls, N.Y.....	1,157,697 96	---	59,574 83	112,394 79	4,709 87	1,650 35	1,336,027 80
Globe and Rutgers Fire.....	New York.....	938,897 60	---	2,712 22	21,466 74	4,830 43	---	967,906 99
Greenwich.....	New York.....	1,673,344 92	165,697 98	---	51,095 23	2,625 00	344,051 95	2,236,815 08
Hanover Fire.....	New York.....	2,242,033 50	---	175 00	86,225 89	27,522 58	82,862 89	2,438,819 86
Hartford Fire.....	Hartford.....	9,621,469 04	---	39,456 76	327,791 50	16,958 47	22,583 44	10,028,259 21
Home.....	New York.....	6,832,114 24	262,754 88	---	466,097 67	10,000 00	157,274 63	7,728,241 42
Indemnity Fire.....	New York.....	217,632 49	---	---	9,352 24	---	---	226,984 73
Insurance Co. of N. America.....	Philadelphia.....	4,894,334 49	1,838,619 78	70,948 42	257,650 83	42,644 44	311,521 21	7,415,718 17
Kings County Fire.....	New York.....	171,352 73	---	395 11	10,339 97	3,041 12	---	185,128 93
Mercantile Fire and Marine.....	Boston.....	485,101 44	---	6,803 65	17,856 09	---	4,204 52	513,965 70
Michigan Fire and Marine.....	Detroit.....	392,307 22	---	34,117 17	3,920 02	2,367 57	23,449 76	456,151 74

Milwaukee Mechanics	1,241,646 24	---	49,923 60	48,887 38	4,433 35	4,987 99	1,349,878 56
National Fire	4,276,265 04	---	36,136 37	169,222 72	18,121 65	50,187 45	4,549,933 23
Hartford	424,092 35	4 75	---	13,771 89	---	10,117 19	447,986 18
New York	508,076 77	---	16,553 34	27,794 93	551 36	377,628 16	930,604 56
Pittsburg	1,631,999 84	---	25,905 44	107,855 91	18,391 45	4,570 25	1,788,722 89
New Hampshire Fire	269,962 59	---	---	9,501 06	1,796 46	---	281,260 11
New York Fire	2,343,028 94	---	13,041 85	88,671 48	3,595 78	---	2,448,338 05
Niagara Fire	215,121 34	---	---	8,150 00	---	36,000 00	259,271 34
New York	1,278,358 59	---	45,121 16	77,916 52	---	51 98	1,401,448 25
Milwaukee	997,598 94	---	6,090 02	55,897 82	---	---	1,060,879 13
Hartford	246,561 88	---	---	11,530 70	1,292 35	33,149 67	291,242 25
New York	2,492,666 19	---	33,309 95	194,069 13	6,925 75	709 43	2,727,680 45
Philadelphia	5,493,656 33	---	3,323 66	162,688 61	37,285 68	120,042 14	5,816,996 42
Brooklyn	3,414,389 06	---	4,800 05	267,357 52	19,211 51	9,612 09	3,715,370 23
Hartford	1,420,043 65	411,755 62	---	60,368 99	---	---	1,892,168 26
Providence, R. I.	2,870,876 63	---	---	161,028 80	6,228 91	190,288 21	3,228,422 55
New York	850,343 95	---	17,654 31	26,592 27	10,093 98	9,572 56	914,257 07
Rochester	2,910,560 65	---	27,308 66	158,358 80	6,467 57	---	3,102,695 68
Springfield, Mass	2,230,264 85	385,291 01	25,450 71	83,092 31	43,717 59	40,035 39	2,807,851 86
St. Paul	587,847 31	27,734 82	22,469 47	8,492 56	---	---	646,544 16
New Orleans	1,291,899 21	---	7,103 26	94,299 24	3,008 18	---	1,396,309 89
Chicago	359,909 34	---	112 93	13,895 46	2,511 77	9 35	376,438 85
Philadelphia	552,168 68	---	21,540 13	40,658 34	9,397 75	77,692 33	701,457 23
Philadelphia	146,333 09	---	---	6,461 22	---	45,427 55	198,221 86
New York	2,014,228 51	---	28,494 63	58,759 83	2,044 25	247,009 39	2,350,536 61
New York	927,168 29	---	11,604 73	54,290 20	6,442 06	---	999,505 28
Brooklyn	---	---	---	---	---	---	---
Totals	\$106,131,212 95	\$3,451,257 53	\$1,080,197 38	\$5,737,067 01	\$486,520 26	\$3,891,123 22	\$120,777,378 35

TABLE No. 31.

Showing the various items composing the Expenditures of Fire and Marine Insurance Companies doing business in California on December 31, 1902—Companies of other States.

Name.	Location.	Fire Losses.	Marine Losses.	Dividends.	Commissions and Brokerage.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures.
Aetna	Hartford	\$2,512,498 12	\$198,118 94	\$668,000 00	\$880,583 04	\$321,065 09	\$119,271 49	\$394,310 12	\$5,093,846 80
Agricultural	Watertown, N.Y.	619,297 00	---	50,000 00	338,279 73	88,027 71	47,353 36	119,734 29	1,262,652 09
American	Newark	828,210 98	---	61,847 75	313,033 92	94,820 04	50,991 36	123,435 83	1,472,339 88
American	Boston	192,187 51	---	19,500 00	103,900 34	19,101 45	10,340 71	30,753 53	375,783 54
American Central	St. Louis	682,777 97	---	100,000 00	283,138 39	93,625 25	30,144 04	153,825 49	1,343,511 14
American Fire	Philadelphia	852,790 95	---	30,000 00	354,267 65	120,088 43	37,313 74	112,807 80	1,507,268 57
Assurance Company of America	New York	267,460 03	39 18	10,000 00	118,316 50	1,485 00	12,002 51	566 09	409,869 31
Caledonian-American	New York	16,180 46	---	9,000 00	1,783 88	903 13	323 94	593 17	28,784 58
Citizens	St. Louis	211,096 20	---	---	79,113 34	30,251 38	12,024 14	30,183 30	362,668 36
Commercial Union Fire	New York	74,282 70	---	10,000 00	36,610 90	3,612 43	4,379 61	3,817 08	132,702 72
Connecticut Fire	Hartford	1,411,630 65	---	100,000 00	562,020 74	174,435 43	89,910 78	177,562 00	2,505,559 60
Continental	New York	2,686,323 80	---	250,000 00	1,211,513 77	358,396 11	146,774 76	303,457 48	4,956,405 92
Delaware	Philadelphia	392,467 50	---	---	179,576 97	60,864 46	21,785 34	62,646 36	717,340 63
Dutchess	Poughkeepsie	244,093 07	---	12,000 00	122,052 40	19,784 42	8,795 45	14,278 02	421,003 36
Equitable Fire and Marine	Providence, R. I.	339,595 42	9,485 68	28,000 00	155,751 84	43,482 71	22,173 62	39,854 67	638,343 94
Fire Association	Philadelphia	2,105,820 11	---	200,000 00	674,020 72	325,384 94	92,702 18	166,012 09	3,563,940 04
Firemen's	Baltimore	425,259 51	---	63,692 80	119,565 55	18,923 50	41,562 67	53,155 99	722,160 02
Franklin Fire	Philadelphia	351,751 95	---	80,000 00	141,789 23	35,694 35	20,992 31	92,344 37	722,572 21
German	Freeport, Ill.	1,367,363 16	---	40,000 00	671,500 89	156,355 88	62,341 13	268,450 21	2,566,017 27
German Alliance	New York	199,022 10	---	24,000 00	100,225 48	4,104 35	25,055 33	---	352,407 26
German-American	New York	2,079,178 89	---	300,000 00	775,412 20	213,111 74	109,704 93	374,086 55	3,851,494 31
German Fire	Peoria, Ill.	66,268 84	---	18,000 00	44,128 10	6,060 00	4,650 70	12,099 87	151,207 51
Germania Fire	New York	958,501 76	---	160,000 00	376,072 45	145,968 94	46,383 13	96,120 41	1,782,046 69
Glens Falls	Glens Falls, N. Y.	498,462 05	---	60,000 00	244,794 16	68,795 51	56,201 35	74,913 00	1,003,166 07
Globe & Rutgers Fire	New York	394,637 50	2,196 31	12,000 00	151,740 41	28,162 74	11,161 33	17,326 81	617,275 10
Greenwich	New York	958,994 56	116,538 27	20,000 00	448,147 29	145,260 66	47,649 82	184,420 68	1,921,021 28
Hanover Fire	New York	1,109,665 50	---	80,000 00	439,528 27	153,244 02	60,609 43	169,856 35	2,012,903 57
Hartford Fire	Hartford	5,466,684 61	---	400,000 00	1,692,993 75	719,185 38	272,379 25	700,399 05	9,251,642 04
Home	New York	3,313,705 11	173,858 60	420,000 00	1,184,506 44	434,493 34	158,580 11	702,652 26	6,387,855 86
Indemnity Fire	New York	94,284 70	---	---	41,188 27	20,105 60	6,721 79	16,948 00	179,248 36
Insurance Company of North America	Philadelphia	2,828,417 55	1,017,855 41	359,940 00	1,312,634 64	394,212 24	159,379 00	375,645 54	6,448,084 38
Kings County Fire	New York	71,573 67	---	10,000 00	42,724 10	4,413 00	4,623 08	9,682 11	143,015 96

Mercantile Fire and Marine		215,048 22	32,000 00	123,544 19	24,755 68	9,764 99	25,145 04	430,258 12
Michigan Fire and Marine	Boston	177,770 75	24,000 00	107,481 07	15,451 00	20,279 14	46,336 93	391,318 89
Milwaukee	Detroit	601,814 27	86,000 00	300,741 10	79,718 47	46,219 14	120,284 22	1,228,797 65
National Fire	Milwaukee	2,143,647 05	120,000 00	797,247 68	247,003 21	137,826 93	344,241 19	3,789,971 06
National Standard	Hartford	268,272 70	10,000 00	116,847 72	1,335 00	14,281 14	4,963 45	415,579 21
National Union Fire	New York	171,031 19	100,000 00	98,398 25	26,630 34	16,577 31	45,929 44	357,566 53
New Hampshire Fire	Pittsburg	890,533 63	12,000 00	394,749 63	72,010 55	49,844 47	102,652 60	1,609,790 88
New York Fire	Manchester	125,499 25	70,000 00	57,718 07	27,455 04	7,251 08	17,162 33	258,559 90
Niagara Fire	New York	1,177,833 27	100,000 00	497,600 63	169,233 21	57,742 65	152,761 04	2,125,170 80
North German Fire	New York	125,439 30	84,000 00	74,538 80	6,447 00	5,031 83	4,761 96	216,218 89
North Western National	Milwaukee	490,376 45	200,000 00	325,408 93	128,894 91	37,725 29	96,036 20	1,162,489 30
Orient	Hartford	610,634 11	100,000 00	222,770 26	63,080 47	13,301 30	75,505 74	1,190,630 17
Pelican	New York	135,363 31	100,000 00	64,995 45	14,835 04	5,286 31	4,616 62	225,096 73
Pennsylvania Fire	Philadelphia	1,389,528 82	100,000 00	543,486 11	134,500 00	65,437 34	87,077 38	2,320,029 65
Phoenix	Brooklyn	3,238,708 53	100,000 00	1,151,562 45	366,286 45	116,967 30	459,872 70	5,433,397 43
Providence-Washing-	Hartford	1,826,896 12	240,000 00	660,446 75	188,602 08	116,925 14	331,792 01	3,363,162 10
ton	Providence, R. I.	815,918 21	50,000 00	351,375 25	101,974 56	48,146 13	83,845 42	1,732,403 04
Queen	New York	1,529,551 90	100,000 00	518,889 68	202,447 14	60,582 09	267,566 77	2,679,037 58
Rochester German	Rochester, N. Y.	424,851 31	20,000 00	223,011 23	32,141 98	22,113 91	61,478 85	783,597 28
Springfield Fire and Marine	Springfld, Mass.	1,705,110 78	200,000 00	570,247 73	133,891 72	106,796 37	275,181 16	2,991,227 76
St. Paul Fire and Marine	St. Paul	1,209,346 52	50,000 00	620,698 27	97,140 47	63,063 58	182,113 01	2,486,965 02
Teutonia	New Orleans	393,220 23	25,150 00	129,136 75	20,820 00	23,476 00	46,711 05	645,038 86
Traders	Chicago	702,482 95	50,000 00	282,939 29	91,159 83	47,046 61	53,732 31	1,227,360 99
Union	Philadelphia	201,419 20	5,000 00	52,557 58	40,508 18	9,954 29	27,375 06	336,814 31
United Firemen's	Philadelphia	239,028 49	30,000 00	120,961 00	29,528 13	14,988 82	58,563 54	493,019 98
Victoria Fire	New York	72,024 93	40,293 99	40,293 99	3,757 06	2,322 94	2,775 65	121,174 57
Westchester Fire	New York	1,150,341 06	48,000 00	480,801 89	125,783 77	51,401 42	146,767 62	2,003,095 76
Williamsburg City Fire	Brooklyn	467,905 83	59,802 00	240,035 21	80,076 37	10,863 30	54,069 38	912,752 09
Totals		\$56,120,118 31	\$5,405,932 55	\$22,359,260 32	\$6,828,291 89	\$2,973,549 66	\$8,060,257 19	\$103,834,722 92

TABLE No. 32.

Showing amount of Risks Written, Premiums Received, and amount of Risks in Force on December 31, 1902, with Premiums thereon, of Fire and Fire and Marine Insurance Companies doing business in California—Companies of other States.

Name.	Location.	RISKS WRITTEN DURING THE YEAR.			
		Fire.	Premiums.	Marine.	Premiums.
Ætna	Hartford	\$548,714,827 00	\$6,779,612 73	\$103,297,706 00	\$433,100 91
Agricultural	Watertown, N. Y.	163,845,700 00	1,781,535 00	---	\$7,212,713 64
American	Newark	182,875,645 00	2,141,812 53	---	1,781,535 00
American	Boston	48,916,281 00	605,669 27	---	2,141,812 53
American Central	St. Louis	153,315,919 00	1,956,107 36	---	605,669 27
American Fire	Philadelphia	148,764,722 00	1,955,446 51	---	1,956,107 36
Assurance Company of America	New York	52,859,148 00	699,016 24	---	1,955,446 51
Caledonian-American	New York	6,607,058 00	79,336 91	---	699,016 24
Citizens	St. Louis	135,356,453 00	1,951,807 43	128,435 00	79,336 91
Commercial Union Fire	New York	28,657,986 00	331,015 74	---	1,951,807 43
Connecticut Fire	Hartford	248,557,002 00	3,242,820 33	---	331,015 74
Continental	New York	641,417,790 00	6,448,202 93	---	3,242,820 33
Delaware	Philadelphia	83,284,905 00	1,017,223 22	---	6,448,202 93
Dutchess	Poughkeepsie.	48,602,409 00	603,863 33	---	1,017,223 22
Equitable Fire and Marine	Providence, R. I.	66,285,353 00	886,703 36	---	603,863 33
Fire Association	Philadelphia	362,019,990 00	4,706,061 60	1,368,216 00	886,703 36
Firemen's	Baltimore	76,873,996 00	968,407 77	---	4,706,061 60
Franklin Fire	Philadelphia	65,877,097 00	826,889 07	---	968,407 77
German	Freeport, Ill.	248,609,215 00	3,539,336 71	---	826,889 07
German Alliance	New York	48,918,363 00	509,084 13	---	3,539,336 71
German-American	New York	694,609,805 00	7,046,328 15	---	509,084 13
German Fire	Peoria, Ill.	16,055,162 00	227,651 05	---	7,046,328 15
Germania Fire	New York	260,119,652 00	2,411,292 91	---	227,651 05
Glens Falls	Glens Falls, N. Y.	125,786,338 00	1,525,027 55	---	2,411,292 91
Globe and Rutgers Fire	New York	93,323,082 00	1,353,755 35	---	1,525,027 55
Greenwich	New York	267,528,579 00	2,303,133 15	---	1,353,755 35
Hanover Fire	New York	315,624,760 00	3,243,035 67	---	2,303,133 15
Hartford Fire	Hartford	903,586,409 00	12,010,856 93	---	3,243,035 67
Home	New York	1,046,614,153 00	10,628,215 27	65,283,683 00	12,010,856 93
Indemnity Fire	New York	23,933,745 00	316,299 29	---	10,628,215 27
Insurance Company of North America	Philadelphia	594,679,472 00	6,293,041 37	---	316,299 29
Kings County Fire	New York	23,120,445 00	227,871 64	---	6,293,041 37
Mercantile Fire and Marine	Boston	56,324,588 00	707,135 84	---	227,871 64
Michigan Fire and Marine	Detroit	40,101,101 00	528,589 95	---	707,135 84
					528,589 95

Milwaukee Mechanics.....	Milwaukee	123,683,837 00	1,699,610 25	1,699,610 25	1,699,610 25
National Fire.....	Hartford	570,422,357 00	5,865,471 86	5,865,471 86	5,865,471 86
National Standard.....	New York	55,664,629 00	746,347 68	746,347 68	746,347 68
National Union Fire.....	Pittsburg	54,834,017 00	660,111 95	660,111 95	660,111 95
New Hampshire Fire.....	Manchester	154,408,447 00	2,015,492 45	2,015,492 45	2,015,492 45
New York Fire.....	New York	30,756,051 00	350,721 22	350,721 22	350,721 22
Niagara Fire.....	New York	274,794,855 00	3,227,583 35	3,227,583 35	3,227,583 35
North German Fire.....	New York	20,734,757 00	303,304 42	303,304 42	303,304 42
Northwestern National.....	Milwaukee	149,106,430 00	1,535,484 72	1,535,484 72	1,535,484 72
Orient.....	Hartford	116,233,821 00	1,821,149 64	1,821,149 64	1,821,149 64
Pelican.....	New York	31,867,420 00	354,192 11	354,192 11	354,192 11
Pennsylvania Fire.....	Philadelphia	284,832,230 00	3,488,649 94	3,488,649 94	3,488,649 94
Phoenix.....	Brooklyn	636,790,450 00	6,985,851 54	6,985,851 54	6,985,851 54
Providence-Washington.....	Hartford	398,897,831 00	4,082,629 55	4,082,629 55	4,082,629 55
Queen.....	Providence, R. I.	191,519,336 00	2,105,525 41	2,105,525 41	2,105,525 41
Rochester German.....	New York	304,459,573 00	3,787,560 77	3,787,560 77	3,787,560 77
Springfield Fire and Marine.....	Rochester, N. Y.	101,323,985 00	1,307,782 20	1,307,782 20	1,307,782 20
St. Paul Fire and Marine.....	Springfield, Mass.	344,126,386 00	4,147,138 83	4,147,138 83	4,147,138 83
Teutonia.....	St. Paul	155,277,239 00	2,675,696 49	2,675,696 49	2,675,696 49
Traders.....	New Orleans	53,190,705 00	824,436 73	824,436 73	824,436 73
Union.....	Chicago	140,307,029 00	1,954,611 35	1,954,611 35	1,954,611 35
United Firemen's.....	Philadelphia	37,219,054 00	458,035 95	458,035 95	458,035 95
Victoria Fire.....	Philadelphia	43,598,060 00	505,628 85	505,628 85	505,628 85
Westchester Fire.....	New York	16,230,375 00	173,112 20	173,112 20	173,112 20
Williamsburg City Fire.....	New York	236,755,481 00	2,635,063 11	2,635,063 11	2,635,063 11
Brooklyn.....	Brooklyn	108,715,970 00	1,161,219 61	1,161,219 61	1,161,219 61
Totals.....		\$12,463,498,495 00	\$144,426,588 47	\$798,104,223 00	\$4,683,616 25
					\$149,110,204 72

TABLE No. 32—CONTINUED.

Name.	Location.	RISKS IN FORCE DECEMBER 31, 1902.			
		Fire.	Premiums.	Marine.	Premiums.
Aetna	Hartford	\$618,180,544 00	\$7,516,073 55	\$7,547,121 00	\$208,882 67
Agricultural	Watertown, N. Y.	245,095,200 00	2,454,054 00	.....	.....
American	Newark	310,577,896 00	3,318,926 58	.....	.....
American	Boston	51,163,845 00	604,542 15	.....	.....
American Central	St. Louis	171,040,038 00	2,092,294 75	.....	.....
American Fire	Philadelphia	169,956,909 00	2,089,753 44	.....	.....
Assurance Company of America	New York	36,065,190 00	461,473 25	.....	.....
Caledonian-American	New York	1,543,209 00	16,929 74	.....	.....
Citizens	St. Louis	31,946,779 00	484,291 00	.....	.....
Commercial Union Fire	New York	17,505,555 00	207,544 85	.....	.....
Connecticut Fire	Hartford	360,832,246 00	4,397,416 60	.....	.....
Continental	New York	982,765,884 00	10,115,656 27	.....	.....
Delaware	Philadelphia	112,946,190 00	1,257,636 76	.....	.....
Dutchess	Poughkeepsie	62,346,489 00	707,263 68	.....	.....
Equitable Fire and Marine	Providence, R. I.	77,359,758 00	970,126 59	252,602 00	15,093 81
Fire Association	Philadelphia	420,135,089 00	5,077,089 42	.....	.....
Firemen's	Baltimore	67,187,956 00	624,783 56	.....	.....
Franklin Fire	Philadelphia	99,196,979 00	1,122,825 05	.....	.....
German	Freeport, Ill.	391,075,298 00	5,024,420 06	.....	.....
German Alliance	New York	57,840,325 00	555,426 29	.....	.....
German-American	New York	763,679,727 00	7,073,112 64	.....	.....
German Fire	Peoria, Ill.	23,435,210 00	300,642 10	.....	.....
Germania Fire	New York	413,623,401 00	3,622,328 59	.....	.....
Glens Falls	Glens Falls, N. Y.	202,230,792 00	2,217,798 22	.....	.....
Globe and Rutgers Fire	New York	77,171,509 00	1,166,701 27	.....	.....
Greenwich	New York	315,702,863 00	2,632,054 80	.....	.....
Hanover Fire	New York	333,874,514 00	3,344,002 70	.....	.....
Hartford Fire	Hartford	1,285,842,496 00	15,377,793 45	.....	.....
Home	New York	1,076,070,140 00	11,013,113 00	2,718,222 00	103,099 94
Indemnity Fire	New York	21,041,148 00	262,098 10	.....	.....
Insurance Company of North America	Philadelphia	617,467,186 00	7,276,476 64	.....	.....
Kings County Fire	New York	19,376,990 00	187,524 05	6,505,614 00	391,393 00
Mercantile Fire and Marine	Boston	44,542,240 00	580,867 07	.....	.....
Michigan Fire and Marine	Detroit	44,716,649 00	542,785 79	.....	.....

Milwaukee Mechanics	168,251,543 00	2,040,715 12	2,040,715 12
National Fire	594,626,834 00	5,934,827 51	5,934,827 51
National Standard	36,984,502 00	464,703 91	464,703 91
National Union Fire	44,984,914 00	544,755 71	544,755 71
New Hampshire Fire	219,821,975 00	2,671,660 88	2,671,660 88
New York Fire	25,325,275 00	296,753 77	296,753 77
Niagara Fire	319,884,662 00	3,413,746 73	3,413,746 73
North German Fire	18,346,281 00	263,153 00	263,153 00
Northwestern National	287,573,136 00	2,805,564 06	2,805,564 06
Orient	136,571,568 00	1,561,180 24	1,561,180 24
Pelican	27,181,090 00	280,904 57	280,904 57
Pennsylvania Fire	377,578,475 00	4,124,456 47	4,124,456 47
Phoenix	727,275,923 00	8,182,900 99	8,182,900 99
Phoenix	479,840,702 00	5,115,330 86	5,115,330 86
Providence-Washington	177,159,941 00	2,009,153 15	2,009,153 15
Queen	355,520,521 00	4,142,542 07	4,142,542 07
Rochester German	104,127,444 00	1,221,205 15	1,221,205 15
Springfield Fire and Marine	375,736,339 00	4,260,216 03	4,260,216 03
St. Paul Fire and Marine	216,780,547 00	3,005,203 19	3,005,203 19
Teutonia	47,421,189 00	647,797 50	647,797 50
Traders	144,228,317 00	1,813,394 71	1,813,394 71
Union	44,038,444 00	500,236 09	500,236 09
United Firemen's	59,579,940 00	639,869 53	639,869 53
Victoria Fire	12,920,885 00	142,906 65	142,906 65
Westchester Fire	329,796,195 00	3,088,225 06	3,088,225 06
Williamsburg City Fire	156,657,657 00	1,496,979 50	1,496,979 50
Totals	\$15,012,350,543 00	\$41,231,138 00	\$1,485,269 44
			\$106,779,477 90

TABLE No. 33.

Summary of Assets, Liabilities, Incomes, Expenditures, etc., of Fire and Marine Insurance Companies doing business in California on December 31, 1902—Companies of Foreign Countries.

Name.	Location.	Cash Capital Paid Up.	Assets.	Liabilities, Capital Not Included.	Incomes.
Aachen and Munich Fire	Aix-la-Chapelle, Germany	---	\$1,035,028 56	\$652,713 55	\$891,207 00
Alliance	London	---	904,317 40	217,253 64	309,111 12
Atlas*	London	\$720,000 00	12,828,350 05	10,737,526 45	2,684,566 39
British America	Toronto	---	1,409,865 72	973,762 20	1,382,895 13
Caledonian	Edinburgh.	---	1,695,411 27	998,029 01	1,105,611 37
Commercial Union	London	---	4,075,824 77	2,884,861 35	3,091,865 73
Hamburg-Bremen Fire	Hamburg	---	1,733,385 90	1,359,634 54	1,604,037 13
Helvetia Swiss Fire	St. Gall, Switzerland	---	641,680 79	58,731 74	119,046 14
Law Union and Crown	London	---	697,256 57	250,411 19	440,217 83
Liverpool and London and Globe	Liverpool	---	11,203,849 00	6,392,511 35	6,684,807 47
London	London	---	2,699,376 73	1,426,940 04	1,916,976 64
London and Lancashire Fire	Liverpool	---	2,737,472 96	1,859,149 30	1,933,273 61
Manchester	Manchester	---	1,839,534 45	1,247,162 49	1,412,603 06
Netherlands Fire	The Hague.	---	566,130 60	102,681 58	247,871 37
New Zealand	Auckland	---	501,863 99	138,618 27	178,157 40
North British and Mercantile*	London	3,437,500 00	20,096,180 55	5,878,111 34	9,883,682 60
Northern*	London	1,500,000 00	32,481,766 48	24,922,875 42	7,575,636 19
North German Fire*	Hamburg	375,000 00	1,037,466 55	628,934 67	540,897 41
Norwich Union Fire*	Norwich, England	660,000 00	7,086,930 68	3,155,419 98	5,288,307 58
Palatine	London	---	1,790,150 27	1,033,921 68	1,263,373 82
Phoenix	London	---	3,063,483 98	2,397,218 43	3,094,612 14
Prussian National	Stettin	---	930,372 39	583,146 01	712,815 42
Rhine and Moselle Fire*	Strasbourg	600,000 00	1,512,649 35	421,206 28	499,368 98
Royal	Liverpool	---	7,752,835 10	5,306,338 10	4,972,922 82
Royal Exchange*	London	3,446,099 45	25,417,809 41	16,774,970 86	6,157,398 70
Scottish Union and National	Edinburgh	---	4,581,956 10	2,200,075 74	2,091,341 39
State Fire	Liverpool	---	355,889 14	117,257 87	138,345 38
Sun	London	---	2,902,198 87	1,944,487 65	2,079,519 16
Svea Fire and Life*	Gothenburg, Sweden	---	8,758,673 82	7,247,749 05	3,102,852 41
Thuringia*	Erfurt, Germany	533,333 33	12,818,128 18	11,000,479 07	3,699,439 07
Transatlantic Fire	Hamburg	450,000 00	596,491 98	277,311 54	347,602 43
Union	London	---	1,554,624 25	812,098 94	1,041,206 19
Western	Toronto	---	2,372,701 88	1,580,336 03	2,351,958 70
Totals	---	\$11,721,932 78	\$179,680,317 74	\$115,591,925 36	\$78,872,627 78

* Home office statement.

TABLE No. 33—CONTINUED.

Name.	Location.	Expenditures.	Losses Incurred During the Year.	Net Surplus.
Aachen and Munich Fire	Aix-la-Chapelle, Germany	\$742,046 49	\$384,882 57	\$382,315 01
Alliance	London	184,723 57	88,743 11	687,063 76
Atlas*	London	2,457,299 31	1,357,285 56	1,371,423 60
British America	Toronto	1,315,808 91	887,703 74	436,103 52
Caledonian	Edinburgh	1,007,881 82	541,178 01	697,382 26
Commercial Union	London	2,663,800 20	1,670,435 72	1,190,963 42
Hamburg-Bremen Fire	Hamburg	1,443,685 91	898,011 40	373,751 36
Helvetia Swiss Fire	St. Gall, Switzerland	138,261 03	29,520 21	582,949 05
Law Union and Crown	London	443,470 50	161,513 57	446,845 38
Liverpool and London and Globe	Liverpool	5,889,323 75	3,400,169 15	4,811,337 65
London	Liverpool	1,444,191 91	803,716 04	1,272,436 69
London and Lancashire Fire	London	1,569,633 47	846,920 25	878,323 66
Manchester	Manchester	1,341,288 30	741,381 10	592,371 96
Netherlands Fire	The Hague	152,777 55	33,694 47	463,449 02
New Zealand	Auckland	182,022 39	70,899 00	363,245 72
North British and Mercantile*	London	9,078,618 79	4,898,331 06	10,780,569 21
Northern*	London	6,182,503 08	2,351,682 35	6,068,891 06
North German Fire*	Hamburg	594,544 08	351,861 71	33,531 58
Norwich Union Fire*	Norwich, England	4,529,610 63	2,393,249 94	3,261,510 70
Palatine	London	2,956,585 92	540,421 46	756,228 59
Phoenix	London	2,716,803 72	1,656,143 00	666,265 55
Prussian National	Stettin	616,905 00	342,021 75	347,226 38
Rhine and Moselle Fire*	Strasbourg	411,203 69	186,780 79	491,443 07
Royal	Liverpool	4,215,628 60	2,407,022 01	2,446,497 00
Royal Exchange*	London	5,825,467 90	1,701,125 00	5,186,799 10
Scottish Union and National	Edinburgh	1,924,378 31	1,159,585 26	2,381,880 36
State Fire	Liverpool	186,102 76	74,961 83	238,631 27
Sun	London	1,716,729 77	991,990 04	957,711 22
Svea Fire and Life*	Gothenburg, Sweden	2,921,264 89	721,915 27	977,591 44
Thuringia*	Erfurt, Germany	3,051,763 97	859,780 32	1,307,649 11
Transatlantic Fire	Hamburg	312,346 79	168,425 29	319,180 44
Union	London	1,050,025 02	435,598 79	742,525 31
Western	Toronto	2,392,370 61	1,601,868 10	792,365 85
Totals		\$69,659,068 44	\$34,758,817 87	\$52,366,459 60

* Home office statement.

TABLE No. 34.

Showing the various items composing the Assets of Fire and Marine Insurance Companies doing business in California on December 31, 1902—
Companies of Foreign Countries.

Name.	Location.	Real Estate.	Loans on Mortgages.	Stocks and Bonds Owned.	Collateral Loans.	Cash in Office and Banks.
Aachen and Munich Fire	Aix-la-Chapelle, Ger.			\$734,535 00		\$147,432 85
Alliance	London	\$173,170 87		587,000 00		73,868 80
Atlas*	London	444,986 54	\$35,841 88	2,420,650 79		336,031 83
British America	Toronto		10,000 00	997,967 44		108,009 28
Caledonian	Edinburgh	427,854 07		977,225 00		105,958 89
Commercial Union	London	888,148 69	212,000 00	2,140,981 25		183,963 13
Hamburg-Bremen Fire	Hamburg			1,489,075 00	\$40,000 00	55,309 11
Helvetia Swiss Fire	St. Gall, Switzerland			626,433 75		4,481 75
Law Union and Crown	London			608,396 25		23,917 87
Liverpool and London and Globe	Liverpool	1,865,833 00	2,861,750 00	3,632,838 75		1,487,541 99
London	London	300,000 00		2,021,238 75		338,862 89
London and Lancashire Fire	Liverpool			1,684,054 67		343,229 34
Manchester	Manchester	4,500 00		1,326,660 00		220,992 86
Netherlands Fire	The Hague			492,960 00		54,202 13
New Zealand	Auckland	185,000 00		271,375 00		1,397 44
North British and Mercantile*	London	2,956,328 45	316,235 90	13,779,468 98	175,000 00	836,336 75
Northern*	London	2,622,000 85	1,292,679 15	20,921,676 10	3,161,281 25	644,513 51
North German Fire*	Hamburg	100,000 00	118,125 00	391,741 99		184,638 68
Norwich Union Fire*	Norwich, England	289,500 00	40,000 00	4,515,078 50		1,146,877 34
Palatine	London			1,294,087 50		243,276 00
Phoenix	London	800 00		2,469,341 25		276,907 12
Prussian National	Stettin	287,500 00		740,746 25		65,646 25
Rhine and Moselle Fire*	Strasbourg		241,300 00	689,125 25		155,025 51
Royal	Liverpool	1,421,012 62	884,000 00	3,600,104 08		729,391 49
Royal Exchange*	London	1,319,546 58	4,260,143 93	14,406,270 00	3,089,569 83	630,036 85
Scottish Union and National	Edinburgh	270,589 53	984,821 41	2,361,089 73	2,600 00	403,156 85
State Fire	Liverpool			310,611 67		19,146 57
Sun	London	250,000 00	188,000 00	1,819,983 75		269,228 93
Svea Fire and Life*	Gothenburg, Sweden	504,666 67	3,749,872 80	2,305,458 00	1,418,643 69	168,154 83
Thuringia*	Erfurt, Germany	486,407 50	8,349,032 84	1,624,650 75		923,857 82
Transatlantic Fire	Hamburg			429,800 00		32,544 71
Union	London			1,104,405 00		62,498 05
Western	Toronto	200,000 00		1,658,268 50		174,343 57
Totals		\$14,997,845 37	\$23,563,802 91	\$94,433,358 95	\$7,887,094 77	\$10,500,780 99

* one office statement.

TABLE No. 34—CONTINUED.

Name.	Location.	Interest Due and Accrued.	Premiums in Course of Collection.	Bills Receivable, Not Matured, Taken for Fire and Marine Risks.	All Other Assets.	Total Assets.
Aachen and Munich Fire.	Aix-la-Chapelle, Ger.	-----	\$151,598 90	\$1,378 79	\$83 02	\$1,035,028 56
Alliance	London	\$2,250 00	65,430 81	-----	2,596 92	904,317 40
Atlas*	London	24,873 73	58,458 68	-----	9,508,106 60	12,828,950 05
British America	Toronto	12,491 54	281,397 46	-----	-----	1,409,865 72
Caledonian	Edinburgh	10,337 49	167,579 74	348 08	6,108 00	1,695,411 27
Commercial Union	London	5,099 41	630,792 76	9,114 41	5,725 12	4,075,824 77
Hamburg-Bremen Fire	Hamburg	-----	149,001 79	-----	-----	1,733,385 90
Helvetia Swiss Fire	St. Gall, Switzerland	4,750 00	5,146 13	-----	869 16	641,680 79
Law Union and Crown	London	3,345 86	61,596 59	-----	-----	697,256 57
Liverpool and London and Globe.	Liverpool	33,821 04	1,309,319 82	-----	12,744 40	11,203,849 00
London	London	5,914 55	283,360 54	-----	-----	2,699,376 73
London and Lancashire Fire	Liverpool	22,905 82	364,200 52	3,884 51	19,198 10	2,737,472 96
Manchester	Manchester	8,324 17	278,859 02	198 40	-----	1,839,534 45
Netherlands Fire	The Hague	3,025 83	15,942 64	-----	-----	566,130 60
New Zealand	Auckland	1,500 00	38,657 35	3,334 20	-----	501,863 99
North British and Mercantile*	London	66,902 35	360,109 95	71,262 25	1,534,535 92	20,096,180 55
North*	London	294,073 58	180,045 44	83,401 94	3,282,094 66	32,481,766 48
North German Fire*	Hamburg	3,901 52	146,131 95	-----	92,927 41	1,037,466 55
Norwich Union Fire*	Norwich, England	48,866 94	978,696 48	67,911 42	-----	7,086,930 68
Palatine	London	291 67	252,201 07	-----	294 03	1,790,150 27
Phoenix	London	29,042 50	284,841 84	-----	3,351 27	3,063,483 98
Prussian National	Stettin	7,304 16	115,788 95	-----	86 78	930,372 39
Rhine and Moselle Fire*	Strasbourg	13,088 98	44,279 98	-----	82,329 63	1,512,649 35
Royal	Liverpool	46,982 89	1,034,049 01	-----	37,295 01	7,752,835 10
Royal Exchange*	London	170,137 00	551,786 55	39,497 62	950,881 05	25,417,869 41
Scottish Union and National	Edinburgh	41,053 19	478,970 21	-----	39,675 18	4,581,956 10
State Fire	Liverpool	2,233 30	23,897 60	-----	-----	355,889 14
Sun	London	22,803 95	350,805 57	-----	1,316 67	2,902,198 87
Svea Fire and Life*	Gothenburg, Sweden	86,167 14	265,506 90	-----	260,203 79	8,758,673 82
Thuringia*	Erfurt, Germany	38,764 56	202,439 18	-----	1,192,975 53	12,818,128 18
Transatlantic Fire	Hamburg	3,585 00	81,237 51	-----	49,324 76	596,491 98
Union	London	9,360 97	178,300 23	-----	-----	1,554,624 25
Western	Toronto	-----	490,299 05	29,790 76	-----	2,372,701 88
Totals	-----	\$1,023,199 14	\$9,380,790 22	\$310,722 38	\$17,082,723 01	\$179,680,317 74

* Home office statement.

TABLE No. 35.

Showing the various items composing the Liabilities, except Capital Stock, of Fire and Marine Insurance Companies doing business in California on December 31, 1902—Companies of Foreign Countries.

Name.	Location.	Losses Adjusted.	Losses Unadjusted.	Losses Resisted.	Fire Reinsurance.
Aachen and Munich Fire	Aix-la-Chapelle, Ger.	\$6,254 98	\$63,462 68	\$9,441 74	\$539,283 34
Alliance	London	16 35	10,145 82	---	179,930 52
Atlas *	London	---	299,545 02	---	1,445,462 69
British America	Toronto	---	73,936 71	7,544 89	732,920 08
Caledonian	Edinburgh	19,350 32	59,879 53	7,600 55	822,661 11
Commercial Union	London	37,372 87	213,245 00	37,200 00	2,368,397 87
Hamburg-Bremen Fire	Hamburg	79,950 00	89,340 00	12,150 00	1,207,756 10
Helvetia Swiss Fire	St. Gall, Switzerland	8,175 00	1,770 50	---	46,231 79
Law Union and Crown	London	2,663 48	11,949 26	5,637 50	206,909 53
Liverpool and London and Globe	Liverpool	4,022 79	570,424 76	49,690 00	5,225,453 61
London	London	11,525 00	128,558 00	13,825 00	1,218,057 54
London and Lancashire Fire	Liverpool	26,590 00	66,378 10	30,097 22	1,626,532 24
Manchester	Manchester	34,254 19	52,128 76	37,345 39	1,046,298 97
Netherlands Fire	The Hague	19 00	9,962 15	7,625 00	77,659 02
New Zealand	Auckland	---	5,140 30	6,370 00	101,681 40
North British and Mercantile *	London	---	882,925 60	---	3,732,081 08
Northern *	London	---	494,102 94	---	2,400,914 46
North German Fire *	Hamburg	---	58,491 75	---	248,087 64
Norwich Union Fire *	Norwich, England	---	267,357 92	---	2,861,812 54
Palatine	London	37,725 00	53,978 00	14,567 00	852,714 71
Phoenix	London	51,250 00	233,432 00	24,892 00	1,775,804 09
Prussian National	Stettin	28,921 16	23,844 87	6,550 00	497,166 86
Rhine and Moselle Fire *	Strasbourg	19,830 77	19,683 87	252 50	307,403 82
Royal	Liverpool	47,899 81	266,063 99	101,760 78	4,356,665 98
Royal Exchange *	London	---	293,935 75	---	1,139,089 51
Scottish Union and National	Edinburgh	62,374 18	152,839 91	32,445 34	1,704,305 08
State Fire	Liverpool	5,332 60	12,036 17	1,882 22	92,094 08
Sun	London	57,151 66	97,191 59	24,796 33	1,677,565 64
Svea Fire and Life *	Gothenburg, Sweden	133,333 33	---	---	704,800 00
Thuringia *	Erfurt, Germany	---	315,013 00	---	830,059 61
Transatlantic Fire	Hamburg	820 00	13,821 52	4,135 00	237,730 00
Union	London	35,806 00	58,546 26	27,955 02	652,328 05
Western	Toronto	28,611 06	85,339 49	6,136 13	1,310,493 05
Totals	---	\$747,804 57	\$4,984,671 22	\$473,524 61	\$42,226,352 01

* Home office statement.

TABLE No. 35—CONTINUED.

Name.	Location.	Marine Reinsurance.	Liability under Life Department.	All Other Claims.	Total Liabilities.	Net Surplus.
Aachen and Munich Fire	Aix-la-Chapelle, Ger.			\$34,070 81	\$652,713 55	\$332,315 01
Alliance	London			27,160 95	217,253 64	687,063 76
Atlas *	London		\$8,789,044 27	203,474 47	10,737,526 45	1,371,423 60
British America	Toronto	\$71,149 72		68,260 48	973,762 20	436,103 52
Caledonian	Edinburgh			70,514 95	998,029 01	697,382 26
Commercial Union	London			134,932 42	2,884,861 35	1,190,963 42
Hamburg-Bremen Fire	Hamburg	51,136 06		42,213 44	1,359,634 54	373,751 36
Helvetia Swiss Fire	St. Gall, Switzerland			4,440 97	58,731 74	582,949 05
Law Union and Crown	London			17,279 88	250,411 19	446,845 38
Liverpool and London and Globe	Liverpool		68,819 77	474,100 42	6,392,511 35	4,811,337 65
London	London			54,974 50	1,426,940 04	1,272,436 69
London and Lancashire Fire	Liverpool			109,551 74	1,859,149 30	878,323 66
Manchester	Manchester			77,135 18	1,247,162 49	592,371 96
Netherlands Fire	The Hague			7,416 41	102,681 58	463,449 02
New Zealand	Auckland			14,288 49	138,618 27	363,245 72
North British and Mercantile *	London	11,138 08		1,263,104 66	5,878,111 34	10,780,569 21
Northern *	London		21,746,507 38	281,350 64	24,922,875 42	6,058,891 06
Norwegian Fire *	Hamburg			322,355 28	628,934 67	33,531 88
Norwich Union Fire *	Norwich, England			36,249 52	3,163,419 98	3,261,510 70
Palatine	London			74,936 97	756,228 59	2,446,497 00
Phoenix	London			311,860 34	2,397,218 43	646,265 55
Prussian National	Stettin	9 50		26,653 62	583,146 01	347,226 38
Rhine and Moselle Fire *	Strasbourg			74,035 32	421,206 28	491,443 07
Royal	Liverpool		100,583 33	433,364 21	5,306,338 10	2,446,497 00
Royal Exchange *	London	166,198 45	14,434,005 50	741,741 65	16,774,970 86	5,196,799 10
Scottish Union and National	Edinburgh			248,111 23	2,200,075 74	2,381,880 36
State Fire	Liverpool			5,912 80	117,257 87	238,631 27
Sun	London			87,782 43	1,944,487 65	957,711 22
Svea Fire and Life *	Gothenburg, Sweden		6,091,765 14	317,850 58	7,247,749 05	977,591 44
Thuringia *	Erfurt, Germany	1,745 39	9,729,030 58	124,030 49	11,000,479 07	1,367,649 11
Transatlantic Fire	Hamburg			20,805 02	277,311 54	319,180 44
Union	London			37,463 61	812,098 94	742,525 31
Western	Toronto	91,439 25		58,317 05	1,580,336 03	792,365 85
Totals		\$393,416 45	\$60,959,755 97	\$5,806,340 53	\$115,591,925 36	\$52,366,459 60

* Home office statement.

TABLE No. 36.

Showing the various items composing the Incomes of Fire and Fire and Marine Insurance Companies doing business in California on December 31, 1902—Companies of Foreign Countries.

Name.	Location.	Fire Premiums.	Marine Premiums.	Interest on Mortgages.	Interest and Dividends from Other Sources.	From All Other Sources.	Total Income.
Aachen and Munich Fire	Aix-la-Chapelle, Ger.	\$777,787 78			\$25,906 82	\$57,512 40	\$861,207 00
Alliance	London	276,607 64			18,681 98	13,821 50	304,111 12
Atlas*	London	2,577,533 42			84,635 56	22,397 41	2,684,566 39
British America	Toronto	1,096,825 89	\$255,499 00		30,570 24		1,382,895 13
Caledonian	Edinburgh	1,041,162 13			44,079 61	20,370 63	1,056,611 37
Commercial Union	London	2,810,084 64	181,480 65	\$10,408 13	71,379 46	18,512 85	3,091,865 73
Hamburg-Bremen Fire.	Hamburg	1,551,888 41			52,148 72		1,604,037 13
Helvetia Swiss Fire	St. Gall, Switzerland	70,229 70			20,717 32	28,099 12	119,046 14
Law Union and Crown	London	304,674 08			20,051 74	115,492 01	440,217 83
Liverpool and London and Globe	Liverpool	6,289,727 75			218,390 50	41,650 22	6,684,807 47
London	London	1,419,777 67	419,196 76	135,039 00	78,002 21		1,916,976 64
London and Lancashire Fire.	Liverpool	1,858,497 32			71,774 89	3,001 40	1,933,273 61
Manchester	Manchester	1,369,144 88			43,458 18		1,412,603 06
Netherlands Fire.	The Hague	47,594 52			15,276 85	185,000 00	247,871 37
New Zealand	Auckland	132,526 70	29,425 70		7,500 00	8,705 00	178,157 40
North British and Mercantile *	London	9,302,282 87			520,875 98	523 75	9,883,682 60
Northern*	London	4,801,828 93			1,036,467 63	1,737,339 63	7,575,636 19
North German Fire*	Hamburg	505,225 49		4,602 40	17,375 47	13,694 05	540,897 41
Norwich Union Fire*	Norwich, England	5,115,849 67		1,665 00	152,886 79	17,906 12	5,288,307 58
Palatine	London	1,255,686 55			27,685 27		1,283,373 82
Phoenix	London	2,502,937 15			81,893 22	509,781 77	3,094,612 14
Prussian National	Stettin	633,183 52	2,791 09		24,479 89	52,360 92	712,815 42
Rhine and Moselle Fire*	Strasbourg	423,363 53		9,626 36	30,279 03	36,100 06	499,368 98
Royal	Liverpool	474,524 79		21,375 00	145,604 54	60,634 49	4,972,922 82
Royal Exchange*	London	2,721,734 85	767,416 85		862,448 40	1,805,798 60	6,157,398 70
Scottish Union and National	Edinburgh	1,935,612 44			155,339 22	389 73	2,091,341 39
State Fire.	Liverpool	161,878 45			8,114 78	28,352 15	198,345 38
Sun.	London	1,996,430 21		9,080 00	61,504 59	12,444 36	2,079,519 16
Svea Fire and Life*	Gothenburg, Sweden	1,774,647 89			329,456 17	998,748 35	3,102,852 41
Thuringia*	Erfurt, Germany	1,588,158 54	12,390 36	338,645 70	114,444 50	1,645,799 97	3,699,439 07
Transatlantic Fire	Hamburg	328,653 41			18,949 02		347,602 43
Union	London	911,262 77			26,748 34	103,195 08	1,041,206 19
Western	Toronto	1,819,056 90	463,516 14		68,485 66		2,351,058 70
Totals		\$64,187,106 49	\$2,131,716 55	\$530,441 59	\$4,485,731 58	\$7,537,631 57	\$78,872,627 78

* Home office statement.

TABLE No. 37.—Showing the various items composing the Expenditures of Fire and Marine Insurance Companies doing business in California on December 31, 1902—Companies of Foreign Countries.

Name.	Location.	Fire Losses.	Marine Losses.	Dividends.	Brokerage and Commission.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures
Aachen & Munich Fire Alliance	Aix-la-Chapelle. London	\$389,596 97 83,951 49	-----	-----	\$157,833 58 63,780 62	\$77,954 83 14,185 03	\$18,930 09 3,801 75	\$97,731 02 19,004 68	\$742,046 49 184,723 57
Atlas*	Toronto	1,366,457 20	\$199,747 41	\$154,193 75	517,300 79	-----	-----	419,347 57	2,457,298 31
British America	Edinburgh	659,086 33	-----	-----	244,976 51	66,128 49	40,467 59	105,402 58	1,315,808 91
Caledonian	London	596,609 44	116,615 66	-----	239,144 27	82,065 57	25,618 95	64,443 59	1,007,881 82
Commercial Union	Hamburg	1,634,610 06	-----	-----	548,850 47	142,918 49	72,245 78	148,559 74	2,663,800 20
Hamburg-Bremen Fire	St. Gall	889,731 40	-----	-----	298,213 03	122,819 15	36,421 29	96,501 04	1,443,685 91
Helvetia Swiss Fire	London	51,589 45	-----	-----	31,904 61	2,750 00	6,131 00	45,885 97	138,261 03
Law Union & Crown	Liverpool	201,254 17	-----	-----	102,696 49	8,218 15	6,789 57	124,512 12	443,470 50
Liverpool and London and Globe	Liverpool	3,358,945 64	-----	-----	1,006,107 42	364,180 50	162,178 38	937,911 81	5,889,323 75
London and Lancashire Fire	London	628,188 57	105,978 43	-----	411,292 21	100,423 97	47,374 20	90,964 53	1,444,191 91
Manchester	Liverpool	875,392 44	-----	-----	357,025 23	153,960 78	52,351 13	130,903 89	1,569,633 47
Netherlands Fire	Manchester	804,391 57	-----	-----	278,670 81	112,857 73	42,478 74	103,389 45	1,341,288 30
New Zealand	The Hague	66,827 50	-----	-----	17,674 68	9,151 67	3,417 54	55,706 16	152,777 55
North British and Mercantile*	Auckland	57,697 26	15,443 42	-----	23,118 30	25,011 10	4,452 69	56,299 62	132,622 39
Northern*	London	4,977,291 87	-----	945,973 00	1,682,052 58	1,442,967 22	6,200 62	24,133 50	9,078,618 79
North German Fire*	London	2,285,494 14	-----	481,308 00	781,795 52	831,291 42	128,399 41	1,674,154 59	6,182,503 08
Norwich Union Fire*	Hamburg	370,508 93	-----	-----	61,124 84	62,757 92	8,930 94	91,221 45	554,544 08
Palatine	Norwich, Eng.	2,456,787 50	-----	218,790 00	1,022,677 17	456,826 33	101,729 02	272,800 61	4,529,610 63
Phoenix	London	538,886 49	-----	-----	254,495 60	67,918 67	34,926 99	60,358 17	956,585 92
Prussian National	Stettin	1,776,563 86	-----	-----	491,607 38	158,041 24	75,488 02	215,103 22	2,716,803 72
Rhine & Moselle Fire*	Strasbourg	347,824 80	393 28	70,000 00	162,645 13	55,845 90	17,246 34	32,949 55	616,905 00
Royal	Liverpool	200,402 04	-----	-----	79,648 73	44,387 40	15,713 79	1,051 73	411,203 69
Royal Exchange*	London	2,556,026 59	-----	-----	830,703 18	383,663 81	127,880 14	317,354 88	4,215,628 60
Scottish Union & Nat'l State Fire	Edinburgh	1,755,812 50	571,199 20	482,453 85	480,442 60	626,426 80	59,597 30	1,849,535 65	5,825,467 90
Sun	Liverpool	1,179,848 18	-----	-----	401,906 64	100,287 35	84,076 54	158,259 60	1,924,378 31
Svea Fire and Life*	London	78,675 56	-----	-----	38,353 77	8,608 51	3,682 69	56,782 23	186,102 76
Thuringia*	Gothenburg	991,990 04	-----	-----	441,039 81	103,846 99	64,350 66	113,502 27	1,716,729 77
Transatlantic Fire	Erfurt, Germany	721,915 27	-----	-----	533,411 72	191,780 69	15,706 38	1,448,450 63	2,921,264 69
Union	Hamburg	184,037 75	16,162 00	135,000 00	523,031 11	123,119 35	24,197 14	1,440,225 07	3,051,763 97
Western	London	498,980 37	-----	-----	86,313 10	18,751 72	4,730 10	18,514 12	312,346 79
Toronto	Toronto	1,273,035 55	328,532 55	-----	225,708 74	48,404 59	25,260 88	251,660 44	1,050,025 02
Totals	-----	\$34,648,450 23	\$1,414,371 95	\$2,487,778 60	\$12,964,676 98	\$6,096,171 37	\$1,384,453 50	\$10,663,165 81	\$69,659,068 44

* Home office statement.

TABLE No. 38.

Showing amount of Risks Written, Premiums Received, and amount of Risks in Force on December 31, 1902, with Premiums thereon, of Fire and Fire and Marine Insurance Companies doing business in California—Companies of Foreign Countries.

Name.	Location.	RISKS WRITTEN DURING THE YEAR.			
		Fire.	Premiums.	Marine.	Premiums.
Aachen and Munich Fire	Aix-la-Chapelle, Ger.	\$78,005,902 00	\$1,082,669 61		\$1,082,669 61
Alliance	London	28,230,241 00	378,071 11		378,071 11
Atlas*	London	1,178,186,400 00	4,096,283 06		4,096,283 06
British America	Toronto	109,014,049 00	1,507,014 77	\$31,929,276 00	\$301,107 53
Caledonian	Edinburgh	131,805,358 00	1,458,388 85		1,458,388 85
Commercial Union	London	337,002,588 00	4,034,476 39		4,235,715 45
Hamburg-Bremen Fire	Hamburg	141,690,790 00	1,934,499 76	58,040,561 00	1,934,499 76
Helvetia Swiss Fire	St. Gall, Switzerland	7,615,265 00	98,405 47		98,405 47
Law Union and Crown	London	40,300,130 00	465,274 48		465,274 48
Liverpool and London and Globe.	Liverpool	888,608,712 00	9,489,673 14		9,489,673 14
London	London	177,051,615 00	1,941,341 15	137,843,145 00	729,289 00
London and Lancashire Fire	Liverpool	263,901,975 00	2,712,264 03		2,712,264 03
Manchester	Manchester	155,983,237 00	2,009,044 80		2,009,044 80
Netherlands Fire	The Hague	14,409,627 00	199,875 29		199,875 29
New Zealand	Auckland	11,962,785 00	201,848 63	3,858,260 00	37,929 06
North British and Mercantile*	London	3,384,208,055 00	9,330,202 78		9,330,202 78
Northern*	London	1,563,827,047 00	4,801,828 93		4,801,828 93
North German Fire*	Hamburg	491,806,972 00	1,310,456 45		1,310,456 45
Norwich Union Fire*	Norwich, Eng.	1,949,788,855 00	6,928,654 08		6,928,654 08
Palatine.	London	149,957,076 00	1,835,168 95		1,835,168 95
Phoenix	London	405,935,216 00	4,349,033 26		4,349,033 26
Prussian National	Stettin	63,213,657 00	853,304 68	801,609 00	2,791 09
Rhine and Moselle Fire*	Strasbourg	457,439,358 00	589,614 67		589,614 67
Royal	Liverpool	787,878,602 00	7,653,286 63		7,653,286 63
Royal Exchange*	London	1,403,830,831 00	3,334,111 75	266,880,425 00	1,289,095 70
Scottish Union and National	Edinburgh	345,945,093 00	3,789,569 47		3,789,569 47
State Fire	Liverpool	16,817,393 00	220,352 38		220,352 38
Sun	London	241,007,429 00	2,638,005 60		2,638,005 60
Svea Fire and Life*	Gothenburg, Sweden	431,227,790 00	2,288,810 57		2,288,810 57
Thuringia*	Erfurt, Germany	1,028,969,697 00	2,993,733 61	42,758,384 00	39,976 89
Transatlantic Fire	Hamburg	33,042,676 00	489,639 83		489,639 83
Union.	London	134,467,085 00	1,424,674 40		1,424,674 40
Western.	Toronto	232,697,077 00	2,736,354 73	84,343,080 00	521,695 56
Totals.		\$16,685,828,583 00	\$89,175,932 81	\$626,454,740 00	\$3,183,123 89
					\$92,359,056 70

*Home office statement.

TABLE No. 38—CONTINUED.

Name.	Location.	RISKS IN FORCE DECEMBER 31, 1902.			
		Fire.	Premiums.	Marine.	Premiums.
Aachen and Munich Fire	Aix-la-Chapelle, Ger.	\$74,964,661 00	\$1,019,368 80		\$1,019,368 80
Alliance	London	25,918,127 00	352,355 39		352,355 39
Atlas*	London	727,198,774 00	2,825,438 73		2,825,438 73
British America	Toronto	109,856,746 00	1,430,051 79	\$3,899,016 00	\$3,899,016 00
Caledonian	Edinburgh	154,158,921 00	1,580,633 67		1,580,633 67
Commercial Union	London	405,174,717 00	4,413,873 43		4,498,421 72
Hamburg-Bremen Fire	Hamburg	182,336,620 00	2,328,566 88	4,183,394 00	2,328,566 88
Helvetia Swiss Fire	St. Gall, Switzerland	7,032,942 00	92,304 98		92,304 98
Law Union and Crown	London	34,403,128 00	406,823 17		406,823 17
Liverpool and London and Globe.	Liverpool	917,710,889 00	9,376,836 49		9,376,836 49
London	London	202,101,881 00	2,155,239 08	15,106,381 00	2,226,309 48
London and Lancashire Fire	Liverpool	346,131,815 00	3,151,502 54		3,151,502 54
Manchester	Manchester	176,979,924 00	2,059,159 09		2,059,159 09
Netherlands Fire	The Hague	10,861,809 00	151,821 92		151,821 92
New Zealand	Auckland	12,419,533 00	194,908 60	504,903 00	214,437 65
North British and Mercantile*	London	2,931,070,130 00	7,442,352 00		7,442,352 00
Northern*	London	1,042,551,365 00	3,201,219 28		3,201,219 28
North German Fire*	Hamburg	162,448,402 00	471,824 10		471,824 10
Norwich Union Fire*	Norwich, Eng.	1,611,379,110 00	5,663,335 62		5,663,335 62
Palatine	London	125,739,381 00	1,552,852 34		1,552,852 34
Phoenix	London	308,773,790 00	3,471,651 24		3,471,651 24
Prussian National	Stettin	73,953,108 00	949,201 83	1,765 00	949,211 33
Rhine and Moselle Fire*	Strasbourg	536,522,262 00	611,635 10		611,635 10
Royal	Liverpool	796,075,394 00	7,954,044 64		7,954,044 64
Royal Exchange*	London	933,434,604 00	2,206,085 73		2,206,085 73
Scottish Union and National	Edinburgh	339,446,883 00	3,343,342 42		3,343,342 42
State Fire	Liverpool	13,512,375 00	181,189 91		181,189 91
Sun	London	330,496,735 00	3,243,341 69		3,243,341 69
Svea Fire and Life*	Gothenburg, Sweden	232,412,509 00	1,469,678 07		1,469,678 07
Thuringia*	Erfurt, Germany	719,001,303 00	1,578,137 82	13,252,449 00	1,590,528 18
Transatlantic Fire	Hamburg	30,411,636 00	448,514 76		448,514 76
Union	London	116,460,627 00	1,269,667 43		1,269,667 43
Western	Toronto	218,563,319 00	2,539,617 10	6,435,029 00	2,717,892 39
Totals		\$13,909,563,420 00	\$79,137,125 61	\$43,382,937 00	\$79,592,347 96
					\$455,222 32

*Home office statement.

TABLE No. 39.—Summary of Assets, Liabilities, Incomes, Expenditures, etc., of Marine Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Cash Capital Paid Up.	Assets.	Liabilities, Capital Not Included.	Incomes.	Expenditures.	Losses Incurred During the Year.	Net Surplus.
Alliance	Berlin	\$250,000 00	\$1,770,108 59	\$1,033,016 79	\$1,330,691 15	\$1,188,985 19	\$249,187 29	\$487,091 80
Alliance Marine	London	1,000,000 00	3,019,490 00	218,893 00	855,070 00	1,023,560 00	518,300 00	1,800,597 00
American and Foreign Marine	New York	200,000 00	445,373 15	71,846 69	138,740 06	76,365 07	52,098 19	173,526 46
Australian Alliance	Melbourne	625,000 00	1,062,664 00	145,325 00	283,760 00	307,445 00	177,915 00	292,339 00
Baloise	Bale	200,000 00	664,574 95	196,699 00	390,197 23	384,473 57	378,665 44	267,875 75
Boston Marine	Boston	1,000,000 00	3,702,962 48	872,016 47	1,500,336 87	1,495,283 84	1,027,956 56	1,830,946 01
British and Foreign Marine	Liverpool	1,302,480 00	8,014,428 01	1,532,778 51	2,615,653 02	1,968,565 66	1,387,473 70	5,179,169 50
Canton	Hong Kong	250,000 00	1,407,403 66	377,892 59	841,371 54	774,100 52	726,924 98	779,511 07
China Traders	Hong Kong	240,000 00	1,241,731 61	449,008 97	672,836 83	671,016 47	883,461 98	552,732 64
Federal	Jersey City	500,000 00	1,656,155 43	523,680 71	748,559 95	538,713 88	442,485 83	632,494 72
Fonciere	Paris	1,250,000 00	3,703,924 28	1,496,421 57	1,687,814 21	1,539,588 33	1,102,588 03	957,502 71
Frankfort Marine, Accident, and Plate Glass*	Frankfort, Ger.	---	1,055,156 77	714,493 62	1,072,650 23	1,070,836 23	631,378 39	340,663 15
Helvetia General	St. Gall, Switz'd	400,000 00	1,477,960 49	441,742 75	527,912 74	504,800 57	294,739 61	636,217 74
Imperial Marine	Tokio	375,000 00	507,967 22	36,517 57	249,948 60	212,702 45	126,665 17	96,449 65
Indemnity Mutual Marine	London	1,005,000 00	4,645,942 04	257,243 83	1,892,908 76	1,753,818 35	1,365,539 46	3,383,698 21
London and Provincial Marine and General	London	500,000 00	2,103,666 30	418,586 20	1,352,736 90	1,079,698 85	1,003,345 85	1,245,080 10
Mannheim*	Mannheim	---	474,349 64	155,042 15	736,510 17	736,020 15	453,001 64	319,307 49
Man On	Hong Kong	500,000 00	599,009 85	66,872 27	224,265 28	270,626 28	132,869 33	32,137 58
Marine	London	900,000 00	6,645,332 91	386,833 00	986,405 90	1,202,095 60	679,129 35	5,358,499 91
Maritime	Liverpool	500,000 00	2,769,213 94	1,400,652 58	1,320,671 87	1,086,677 00	1,086,677 00	868,561 36
North China	Shanghai	600,000 00	1,151,858 07	87,734 39	374,580 46	371,809 73	164,869 91	464,123 68
Ocean Marine	London	500,000 00	2,951,928 77	213,395 00	1,080,740 00	952,740 00	756,485 00	2,238,533 77
Po On	Hong Kong	400,000 00	486,256 35	35,270 60	372,549 50	363,270 00	418,262 00	50,985 75
Reliance Marine	Liverpool	500,000 00	1,579,679 66	353,668 63	724,958 41	608,507 29	485,055 00	726,011 03
Sea	Liverpool	500,000 00	4,477,708 68	1,106,866 71	1,420,973 85	1,055,620 66	708,191 96	2,870,841 87
Standard Marine	Liverpool	500,000 00	1,842,955 00	343,210 00	621,253 00	430,611 00	316,060 00	999,745 00
Switzerland Marine	Zurich	200,000 00	1,023,475 63	712,223 85	478,219 98	496,058 40	704,587 05	111,261 78
Thames and Mersey	Liverpool	1,000,000 00	6,710,745 00	1,793,774 25	2,537,503 50	2,302,847 00	1,622,913 50	3,916,970 75
Union Marine	Liverpool	817,500 00	5,221,806 86	1,786,435 32	2,537,072 78	2,437,894 29	2,086,762 81	2,627,871 54
Universo	Liverpool	300,000 00	725,108 29	371,519 80	1,062,887 74	863,710 08	739,664 76	53,588 49
Wilhelma	Milan	750,000 00	14,003,040 38	12,776,942 50	3,532,260 03	2,430,885 00	354,736 93	476,097 88
Yangtze	Magdeburg	262,800 00	1,061,202 26	176,136 47	455,600 05	400,982 68	231,625 36	622,265 79
Totals	Shanghai	\$17,327,780 00	\$88,273,180 17	\$30,552,720 99	\$34,627,640 61	\$30,706,357 47	\$21,370,127 08	\$40,392,679 18

* United States branch statement.

TABLE No. 40.
Showing the various items composing the Assets of Marine Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Real Estate.	Mortgage Loans.	Stocks and Bonds.	Collateral Loans.	Cash in Office and in Banks.
Alliance	Berlin	\$428,834 34	\$145,000 00	\$386,517 28	-----	\$283,516 89
Alliance Marine	London	185,000 00	-----	2,567,170 00	-----	62,290 00
American and Foreign Marine	New York	-----	-----	399,569 84	-----	16,405 87
Australian Alliance	Melbourne	273,500 00	431,890 00	58,535 00	\$203,240 00	27,584 00
Baloise	Basle	22,000 00	67,000 00	368,508 75	-----	42,094 82
Boston Marine	Boston	15,000 00	1,255,150 00	1,718,570 00	17,250 00	378,889 27
British and Foreign Marine	Liverpool	413,321 92	33,000 00	6,305,665 32	69,959 70	375,608 93
Canton	Hong Kong	-----	646,795 09	408,486 37	-----	129,329 36
China Traders	Hong Kong	-----	293,895 88	258,482 83	-----	573,301 88
Federal	Jersey City	-----	-----	1,082,563 00	-----	360,468 66
Fonciere	Paris	590,392 33	-----	1,882,511 95	-----	204,838 69
Frankfort Marine, Accident, and Plate Glass*	Frankfort, Germany	-----	-----	844,383 74	-----	37,072 67
Helvetia General	St. Gall, Switzerland	54,000 00	438,277 25	465,820 12	-----	306,155 36
Imperial Marine	Tokio	16,530 71	140,758 16	158,391 21	-----	100,199 30
Indemnity Mutual Marine	London	-----	-----	4,012,377 00	-----	247,999 90
London and Provincial Marine and General	London	-----	-----	1,542,954 10	-----	464,209 85
Mannheim*	Mannheim	-----	-----	382,375 00	-----	5,955 38
Man On	Hong Kong	-----	194,000 00	-----	-----	267,748 23
Marine	London	417,947 60	-----	5,779,787 76	-----	99,565 05
Maritime	Liverpool	-----	-----	2,229,367 17	-----	122,967 06
North China	Shanghai	183,874 46	62,150 00	692,865 18	-----	143,193 10
Ocean Marine	London	375,000 00	-----	2,199,538 52	-----	225,953 97
Po On	Hong Kong	-----	97,146 35	-----	-----	276,332 00
Reliance Marine	Liverpool	-----	-----	1,306,135 66	2,250 00	31,343 22
Sea	Liverpool	-----	-----	3,719,341 65	307,500 00	88,633 25
Standard Marine	Liverpool	-----	-----	1,415,081 00	-----	215,695 00
Switzerland General	Zurich	-----	-----	601,514 00	-----	56,012 18
Thames and Mersey	Liverpool	-----	-----	5,824,945 00	117,500 00	159,745 00
Union Marine	Liverpool	81,675 00	-----	4,268,269 50	247,000 00	35,753 23
Univervo	Milan	-----	-----	231,772 80	-----	184,798 17
Wilhelma	Magdeburg	1,221,744 92	11,626,364 63	64,433 42	-----	103,183 84
Yangtse	Shanghai	-----	203,625 00	385,432 50	-----	276,211 97
Totals	-----	\$4,278,821 28	\$15,695,052 36	\$51,501,365 67	\$964,699 70	\$5,902,056 10

* United States branch statement.

TABLE No. 40—CONTINUED.

Name.	Location.	Interest Due and Accrued.	Premiums in Course of Collection.	Bills Receivable, Not Matured, Taken for Marine Risks.	All Other Assets.	Total Assets.
Alliance	Berlin	\$1,599 02	\$165,070 00	---	\$524,611 06	\$1,770,108 59
Alliance Marine	London	15,985 00	16,951 98	\$13,975 00	10,000 00	3,019,490 00
American and Foreign Marine	New York	2,665 15	15,085 00	---	9,780 31	445,373 15
Australian Alliance	Melbourne	5,405 00	15,085 00	1,100 00	46,325 00	1,062,664 00
Baloise	Basle	3,203 88	161,767 50	---	---	664,574 95
Boston Marine.	Boston	15,060 52	214,174 54	79,716 43	9,151 72	3,702,962 48
British and Foreign Marine	Liverpool	38,829 16	677,413 06	81,861 90	18,735 02	8,014,428 01
Canton	Hong Kong	2,322 93	208,742 55	---	5,317 36	1,407,403 66
China Traders	Hong Kong	14,272 36	90,348 90	8,451 81	2,977 95	1,241,731 61
Federal	Jersey City	15,626 08	154,412 65	---	43,085 04	1,666,155 43
Ponciere	Paris	13,008 03	638,124 41	9,493 29	365,555 58	3,703,924 28
Frankfort Marine, Accident, and Plate Glass*	Frankfort, Germany	100 00	173,600 36	---	---	1,055,156 77
Helvetia (General)	St. Gall, Switzerland	13,855 50	193,707 79	---	6,144 47	1,477,960 49
Imperial Marine.	Tokio	---	92,087 84	---	---	507,967 22
Indemnity Mutual Marine	London	---	349,575 06	1,569 50	34,420 58	4,645,942 04
London and Provincial Marine and General	London	---	156,502 35	---	---	2,163,666 30
Mannheim*	Mannheim	---	84,649 26	1,370 00	474,349 64	599,009 85
Man On.	Hong Kong	5,358 65	131,902 97	---	---	6,645,332 91
Marine	London	---	335,235 75	350 00	12,446 75	2,769,213 94
Maritime	Liverpool	---	413,452 75	---	3,428 96	1,151,858 07
North China	Shanghai	7,700 47	59,320 62	2,754 24	---	2,951,928 77
Ocean Marine.	London	24,488 35	126,947 93	---	---	486,256 35
Po On.	Hong Kong	4,235 00	108,543 00	---	---	1,579,679 66
Reliance Marine.	Liverpool	13,216 62	202,371 74	24,362 42	63,236 87	4,477,708 58
Sea	Liverpool	3,541 25	291,066 12	4,389 44	---	1,842,955 00
Standard Marine	Liverpool	16,399 00	194,767 00	1,013 00	---	1,023,475 63
Switzerland General	Zurich	3,065 67	144,763 70	116,381 23	101,738 85	3,092 50
Thames and Mersey	Liverpool	78,362 00	513,976 50	13,134 00	193,155 75	6,710,745 00
Union Marine	Liverpool	41,311 87	357,778 70	66,862 81	5,194 15	5,231,806 86
Universo	Milan	---	295,542 69	7,800 48	---	725,108 29
Wilhelma.	Magdeburg	350 46	95,519 41	---	891,443 70	14,003,040 38
Yangtse	Shanghai	8,056 53	127,944 49	---	931 77	1,061,202 26
Totals	---	\$354,418 50	\$6,791,376 62	\$410,226 13	\$2,375,163 81	\$88,273,180 17

* United States branch statement.

TABLE No. 41.

Showing the various items composing the Liabilities, except Capital Stock, of Marine Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Losses Adjusted.	Losses Unadjusted.	Losses Resisted.	Dividends Unpaid.	Marine Reinsurance.	All Other Claims.	Total Liabilities, Capital Not Included.	Net Surplus.
Alliance	Berlin	-----	\$343,778 72	-----	\$262 50	\$200,548 28	\$488,427 29	\$1,033,016 79	\$487,091 80
Alliance Marine	London	-----	55,080 00	-----	2,540 00	138,978 00	22,295 00	218,893 00	1,800,597 00
American & For'n Marine	New York	-----	6,908 00	\$401 00	10,000 00	22,413 26	32,124 43	71,846 69	173,526 46
Australian Alliance	Melbourne	-----	24,080 00	-----	2,010 00	66,310 00	52,925 00	145,325 00	292,339 00
Baloise	Basle	\$117,651 80	-----	-----	-----	79,047 40	-----	196,099 20	267,875 75
Boston Marine	Boston	15,724 15	165,024 02	1,000 00	-----	219,960 96	470,307 34	872,016 47	1,830,946 01
British & Foreign Marine	Liverpool	-----	802,070 10	-----	1,785 32	570,700 08	158,223 01	1,532,778 51	5,179,169 50
Canton	Hong Kong	-----	75,331 27	9,092 03	3,261 00	221,433 23	68,775 06	377,892 59	779,511 07
China Traders	Hong Kong	-----	88,863 00	-----	7,291 82	178,440 39	174,413 76	449,008 97	552,722 64
Federal	Jersey City	-----	250,185 73	-----	-----	198,860 00	74,614 98	523,660 71	632,494 72
Fonciere	Paris	-----	810,034 02	-----	5,834 56	330,473 06	350,079 93	1,496,421 57	957,502 71
Frankfort Marine, Accident, and Plate Glass*	Frankfort, Ger.	-----	8,401 67	-----	-----	-----	706,091 95	714,493 62	340,663 15
Helvetia General	St. Gall, Switz.	-----	189,849 98	-----	192 00	108,542 57	143,158 20	441,742 75	636,217 74
Imperial Marine	Tokio	-----	12,500 00	-----	456 75	8,152 17	15,408 65	36,517 57	96,449 65
Indemnity Mutual Marine	London	-----	26,227 33	-----	3,516 50	227,500 00	-----	257,243 83	3,383,698 21
London and Provincial Marine and General	London	-----	92,150 00	7,500 00	779 10	256,288 15	61,868 95	418,586 20	1,245,080 10
Mannheim*	Mannheim	-----	43,107 62	-----	-----	99,375 06	12,559 47	155,042 15	319,307 49
Man On	Hong Kong	-----	-----	-----	50,000 00	4,522 27	-----	66,872 27	32,137 58
Marine	London	12,350 00	-----	-----	-----	152,709 50	209,823 50	386,833 00	5,358,499 91
Maritime	Liverpool	-----	597,055 00	-----	1,939 50	682,062 75	119,595 33	1,400,652 58	868,561 36
North China	Shanghai	-----	35,000 00	-----	2,163 36	49,821 03	750 00	87,734 39	464,123 68
Ocean Marine	London	17,465 00	23,750 00	-----	-----	172,180 00	-----	213,395 00	2,238,533 77
Po On	Hong Kong	6,545 00	13,330 00	-----	545 00	13,425 00	-----	35,270 60	50,985 75
Reliance Marine	Liverpool	-----	178,590 00	-----	224 37	143,741 05	1,425 60	353,668 63	50,985 75
Sea	Liverpool	21,889 83	580,720 17	-----	60 00	329,254 60	31,113 21	1,106,866 71	726,011 03
Standard Marine	Liverpool	-----	139,275 00	-----	-----	142,120 00	174,942 11	1,106,866 71	2,870,841 87
Switzerland General	Zurich	-----	326,907 19	-----	10 00	124,311 50	61,815 00	343,210 00	999,745 00
Thames and Mersey	Liverpool	-----	487,160 00	-----	3,508 25	1,247,782 50	260,995 16	712,223 85	111,251 78
Union Marine	Liverpool	-----	733,250 00	-----	881 00	464,116 50	55,323 50	1,793,774 25	3,916,970 75
Univervo	Milan	-----	166,600 91	-----	-----	179,530 14	588,187 85	1,786,435 32	2,627,871 54
Wilhelma	Magdeburg	-----	63,610 00	-----	-----	55,152 70	25,388 72	371,519 80	53,588 49
Yangtse	Shanghai	42,300 00	49,300 00	-----	2,533 97	41,000 00	12,655,179 80	12,776,942 50	476,087 88
Totals	-----	\$233,925 78	\$6,412,439 73	\$17,993 03	\$99,795 00	\$6,728,752 15	\$17,069,815 30	\$30,552,720 99	\$40,392,679 18

*United States branch statement.

TABLE No. 42.

Showing the various items composing the Incomes of Marine Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Marine Premiums.	Interest on Mortgage Loans.	Interest and Dividends from All Other Sources.	From All Other Sources.	Total Income.
Alliance	Berlin	\$386,528 16	\$5,850 00	\$28,928 54	\$909,384 45	\$1,330,691 15
Alliance Marine	London	769,850 00	---	85,220 00	---	855,070 00
American and Foreign Marine	New York	123,430 46	---	10,093 38	5,216 22	138,740 06
Australian Alliance.	Melbourne	112,495 00	16,985 00	9,355 00	144,925 00	283,760 00
Batavia	Batavia	372,305 57	---	17,891 66	---	390,197 23
Boston Marine	Boston	815,786 95	---	74,064 51	559,254 34	1,500,336 87
British and Foreign Marine	Liverpool	2,328,179 66	51,231 07	218,043 66	69,429 70	2,615,653 02
Canton	Hong Kong	766,675 36	39,975 80	28,968 41	---	841,371 54
China Traders	Hong Kong	623,945 43	21,817 47	27,050 73	6,751 97	672,836 83
Federal	Jersey City	701,545 59	---	45,623 53	1,390 83	748,559 95
Fonciere	Paris	1,608,104 00	---	79,710 21	---	1,687,814 21
Frankfort Marine, Accident, and Plate Glass*	Frankfort, Ger.	15,181 51	---	33,028 33	1,024,440 39	1,072,650 23
Helvetia General	St.Gall,Switzerlnd	486,467 23	18,469 04	22,976 47	---	527,912 74
Imperial Marine	Tokio	212,355 05	---	37,305 06	288 49	249,948 60
Indemnity Mutual Marine	London	1,678,942 14	---	143,311 81	70,654 81	1,892,908 76
London and Provincial Marine and General	London	1,287,868 65	---	64,868 25	---	1,352,736 90
Manulheim*	Manulheim	666,635 17	---	---	69,875 00	736,510 17
Man On.	Hong Kong	180,299 26	21,852 02	---	9,098 47	224,265 28
Marine	London	888,319 75	---	13,015 53	---	986,405 90
Maritime	Liverpool	1,247,986 25	---	72,610 62	75 00	1,320,671 87
North China	Shanghai	339,748 59	4,420 00	30,372 27	39 60	374,580 46
Ocean Marine.	London	997,695 00	---	68,545 00	14,500 00	1,080,740 00
Po On.	Hong Kong	334,515 50	---	21,235 00	16,799 00	372,549 50
Reliance Marine	Liverpool	687,612 95	---	37,284 24	61 22	724,958 41
Sea.	Liverpool	1,287,297 27	---	131,985 60	1,690 98	1,420,973 85
Standard Marine.	Liverpool	575,760 00	---	45,493 00	---	621,253 00
Switzerland General	Zurich	455,345 37	---	22,812 39	62 22	478,219 98
Thames and Mersey	Liverpool	2,350,749 00	---	186,581 50	173 00	2,537,503 50
Union Marine	Liverpool	2,388,785 60	---	148,120 31	166 87	2,537,072 78
Universo	Milan	1,052,978 35	---	9,909 39	---	1,062,887 74
Wilhelma	Magdeburg	380,721 64	457,344 54	50,423 24	2,643,770 61	3,532,260 03
Yangtze.	Shanghai	410,746 53	17,524 17	24,689 54	2,639 81	455,000 05
Totals.	---	\$26,534,856 99	\$655,469 11	\$1,887,603 33	\$5,549,711 18	\$34,627,640 61

*United States branch statement.

TABLE No. 43.

Showing the various items composing the Expenditures of Marine Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Marine Losses.	Dividends.	Brokerage and Commissions.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures.
Alliance	Berlin	\$249,187 29	\$50,000 00	---	---	\$2,900 75	\$886,897 15	\$1,188,985 19
Alliance Marine	London	710,560 00	103,170 00	\$21,510 00	\$127,500 00	17,305 00	43,515 00	1,023,560 00
American and Foreign Marine	New York	51,004 22	8,000 00	6,995 97	7,727 95	875 77	1,761 16	76,365 07
Australian Alliance	Melbourne	103,755 00	62,205 00	24,325 00	29,130 00	7,605 00	80,425 00	307,445 00
Balaise	Boston	282,569 05	30,000 00	36,542 63	---	---	35,361 89	384,473 57
Boston Marine	Boston	536,135 04	120,000 00	271,939 56	138,656 12	35,869 00	402,684 12	1,495,283 84
British and Foreign Marine	Liverpool	1,387,473 70	260,496 00	38,608 43	241,883 87	27,432 41	12,961 25	1,968,855 66
Canton	Hong Kong	571,232 78	70,000 00	63,717 34	45,511 88	---	23,638 52	771,106 52
China Traders	Hong Kong	436,665 54	89,638 38	64,562 58	96,971 68	---	23,278 29	671,016 47
Federal	Jersey City	307,300 10	50,000 00	148,619 34	12,561 22	7,192 88	13,040 34	538,713 88
Fonciere	Paris	1,102,588 03	---	247,521 86	169,071 88	---	20,406 86	1,539,588 33
Frankfort Marine, Accident, and Plate Glass*	Frankfort, Ger.	21,983 33	---	259,555 96	---	19,719 15	769,577 79	1,070,836 23
Helvetia General	St. Gall, Switz'd	294,799 61	95,808 00	54,036 01	32,734 22	10,991 38	16,501 35	504,860 57
Imperial Marine	Tokio	126,665 17	37,500 00	20,474 65	24,125 88	---	3,936 75	212,702 45
Indemnity Mutual Marine	London	1,365,539 46	197,483 50	---	73,620 00	---	117,175 39	1,753,818 35
London and Provincial Marine and General	London	---	50,000 00	---	---	---	---	---
Mannheim*	Mannheim	947,580 80	---	---	65,907 10	13,316 37	16,210 95	1,079,698 85
Man On	Hong Kong	446,960 22	---	98,532 12	31,197 74	---	146,013 70	736,020 15
Marine	London	132,869 33	100,140 77	---	35,242 05	2,374 13	270,626 28	2,374 13
Maritime	Liverpool	679,129 35	400,000 00	---	95,128 25	22,833 75	5,004 25	1,202,095 60
North China	Shanghai	1,036,937 68	50,000 00	21,733 98	42,450 63	1,814 56	39,438 48	1,192,375 33
Ocean Marine	London	220,835 00	65,407 02	5,673 56	70,056 22	4,942 67	4,855 26	271,809 73
Po On	Hong Kong	756,485 00	100,000 00	---	---	---	96,255 00	952,740 00
Reliance Marine	Liverpool	287,035 00	40,000 00	---	---	---	36,235 00	363,270 00
Sea	Liverpool	444,514 38	50,000 00	---	---	7,921 07	105,771 84	608,507 29
Standard Marine	Liverpool	753,456 96	100,425 00	81,012 71	90,695 87	30,030 12	---	1,055,620 66
Switzerland General	Liverpool	325,762 00	50,000 00	---	48,776 31	5,460 69	612 00	430,611 00
Thames and Mersey	Zurich	378,212 46	12,000 00	48,081 17	40,387 59	5,106 86	12,270 03	496,058 40
Union Marine	Liverpool	1,835,613 50	199,355 00	---	192,447 88	19,670 69	55,760 22	2,302,847 00
Universo	Liverpool	2,086,762 81	130,800 00	4,900 44	122,852 17	36,840 54	55,878 33	2,437,894 29
Wahine	Milan	739,664 75	---	---	---	4,826 32	119,219 01	863,710 08
Yangtze	Magdeburg	342,575 03	150,000 00	32,590 71	27,773 27	6,420 27	1,871,525 72	2,430,885 00
Yongtse	Shanghai	231,625 36	53,280 00	21,577 71	45,338 93	2,248 95	46,911 73	400,982 63
Totals	---	\$19,193,737 95	\$2,725,703 67	\$1,532,561 73	\$1,897,748 71	\$291,124 20	\$5,065,476 21	\$30,706,357 47

* United States branch statement.

TABLE No. 44.

Showing the amount of Risks Written, Premiums Received, and the amount of Risks in Force on December 31, 1902, with Premiums thereon, of Marine Insurance Companies doing business in California.

Name.	Location.	Risks Written.	Premiums Thereon.	Risks in Force December 31, 1902.	Premiums.
Alliance.....	Berlin.....	\$186,102,211 00	\$2,307,666 17	\$10,462,357 00	\$125,548 28
Alliance Marine.....	London.....	435,037,130 00	1,135,480 00	35,326,445 00	234,925 00
American and Foreign Marine.....	New York.....	143,502,614 00	200,864 24	1,045,993 00	22,413 26
Australasian Alliance.....	Melbourne.....	27,081,605 00	240,860 00	2,689,140 00	28,845 00
Balaise.....	Basle.....	570,111,738 00	543,135 09	22,365,944 00	79,047 40
Boston Marine.....	Boston.....	143,601,853 00	1,018,554 54	6,370,860 00	358,974 34
British and Foreign Marine.....	Liverpool.....	1,074,556,143 00	3,829,456 44	52,142,488 00	1,594,585 44
Canton.....	Hong Kong.....	156,037,354 00	1,028,242 62	39,859,742 00	176,260 85
China Traders.....	Hong Kong.....	172,559,775 00	920,763 19	30,691,000 00	178,440 39
Federal.....	Jersey City.....	443,198,321 00	1,589,450 45	57,799,950 00	198,860 00
Fonciere.....	Paris.....	3,078,132 00	10,080 27	None.	None.
Frankfort Marine, Accident, and Plate Glass*.....	Frankfort, Germany.....	519,056,384 00	735,680 54	8,318,366 00	108,542 57
Helvetia General.....	St. Gall, Switzerland.....	24,962,380 00	301,342 29	1,659,450 00	25,617 92
Imperial Marine.....	Tokio.....	378,297,050 00	1,987,285 00	24,640,707 00	306,000 00
Indemnity Mutual Marine.....	London.....	207,093,800 00	1,594,356 25	30,341,850 00	256,288 15
London and Provincial Marine and General.....	London.....	210,206,796 00	821,348 05	19,881,690 00	99,375 06
Mannheim*.....	Mannheim.....	83,778,422 00	185,988 10	4,074,116 00	9,044 54
Man On.....	Hong Kong.....	1,435,510,000 00	1,576,404 40	45,500,000 00	335,235 75
Marine.....	London.....	273,252,135 00	1,289,592 00	50,142,480 00	682,062 00
Maritime.....	Liverpool.....	201,520,260 00	1,229,075 00	38,920,695 00	839,646 00
North China.....	Shanghai.....	112,145,382 00	364,850 00	10,381,295 00	89,805 00
Ocean Marine.....	London.....	185,196,130 00	968,307 05	11,373,745 00	143,741 04
Po On.....	Hong Kong.....	238,155,710 00	1,317,018 44	20,496,150 00	329,254 60
Reliance Marine.....	Liverpool.....	60,507,970 00	563,726 00	8,468,540 00	142,120 00
Sea.....	Liverpool.....	384,567,998 00	889,112 29	14,382,343 00	124,311 50
Standard Marine.....	Zurich.....	514,791,720 00	3,620,654 00	100,220,310 00	1,615,865 00
Switzerland Marine.....	Liverpool.....	425,117,555 00	3,746,388 06	54,863,870 00	803,572 50
Thames and Mersey.....	Liverpool.....	218,611,341 00	440,030 57	5,766,481 00	55,152 70
Union Marine.....	Liverpool.....	137,502,770 00	607,013 27	2,733,000 00	41,000 00
Universo.....	Milan.....				
Wilhelma.....	Magdeburg.....				
Yangtse.....	Shanghai.....				
Totals.....		\$8,965,140,679 00	\$35,062,724 32	\$710,859,007 00	\$9,034,534 29

*United States branch statement.

TABLE No. 45—RECAPITULATION.

Summary of Assets, Liabilities, Incomes, Expenditures, etc., of Fire and Marine Insurance Companies doing business in California on December 31, 1902.

	Paid-Up Capital.	Assets.	Liabilities.	Incomes.	Expenditures.	Losses Incurred during the Year.	Net Surplus.
California companies	\$1,300,000 00	\$6,517,889 32	\$3,094,451 80	\$5,158,679 40	\$3,617,424 87	\$1,990,863 98	\$2,123,437 52
Companies of other States	39,802,875 00	215,858,893 78	109,528,396 11	120,777,378 35	103,834,722 92	57,882,530 35	66,527,622 67
Companies of foreign countries	11,721,932 78	179,680,317 74	115,591,925 36	78,872,627 78	69,659,068 44	34,758,817 87	52,366,459 60
Marine companies	17,327,780 00	88,273,180 17	30,552,720 99	34,627,640 61	30,706,357 47	21,370,127 08	40,392,679 18
Totals	\$70,152,587 78	\$490,330,281 01	\$258,767,494 26	\$239,436,326 14	\$207,817,573 70	\$116,002,339 28	\$161,410,198 97

TABLE No. 46—RECAPITULATION.

Showing the various items composing the Assets of Fire and Marine Insurance Companies doing business in California on December 31, 1902.

	Real Estate.	Mortgage Loans.	Stocks and Bonds Owned.	Collateral Loans.	Cash in Office and Banks.
California companies	\$646,475 00	\$392,752 31	\$3,930,220 50	\$281,500 00	\$417,765 51
Companies of other States	12,831,564 21	20,257,737 47	146,126,986 25	3,499,701 95	13,509,584 36
Companies of foreign countries	14,997,845 37	23,563,802 91	94,433,358 95	7,887,094 77	10,500,780 99
Marine companies	4,278,821 28	15,695,052 36	51,501,365 67	964,699 70	5,902,056 10
Totals	\$32,804,705 86	\$59,909,345 05	\$295,981,931 37	\$12,632,996 42	\$30,330,186 96
	Interest Due and Accrued.	Premiums in Course of Collection.	Bills Receivable, Not Matured, Taken for Risks.	All Other Assets.	Total Assets.
California companies	\$4,210 95	\$753,157 04	\$65,938 20	\$30,869 81	\$6,517,889 32
Companies of other States	806,529 82	18,164,237 77	361,463 82	251,088 13	215,858,893 78
Companies of foreign countries	1,023,199 14	9,880,790 22	310,792 38	17,082,723 01	179,680,317 74
Marine companies	354,418 50	6,791,376 62	410,226 13	2,375,163 81	88,273,180 17
Totals	\$2,188,358 41	\$35,594,561 65	\$1,148,350 53	\$19,739,844 76	\$490,330,281 01

TABLE No. 47—RECAPITULATION.
Showing the various items composing the Liabilities of Fire and Marine Insurance Companies doing business in California on December 31, 1902.

	Losses Adjusted.	Losses Unadjusted.	Losses Resisted.	Fire Reinsurance.	Marine Reinsurance.	All Other Claims.	Total Liabilities.	Net Surplus.
California companies.....	\$43,720 12	\$167,694 95	\$27,525 00	\$2,541,751 60	\$154,241 55	\$150,518 58	\$3,094,451 80	\$2,123,437 52
Companies of other States.....	2,085,301 27	6,794,170 34	1,122,899 07	92,631,157 11	1,293,680 90	5,601,181 42	109,528,396 11	66,527,622 67
Companies of foreign countries.....	747,864 57	4,984,671 22	473,524 61	42,226,352 01	393,416 45	66,766,096 50	115,591,925 36	52,366,459 60
Marine companies.....	233,925 78	6,412,439 73	17,993 03	-----	6,798,752 15	17,159,610 30	30,552,720 99	40,392,679 18
Totals.....	\$3,110,811 74	\$18,358,976 24	\$1,641,941 71	\$137,399,260 72	\$8,570,097 05	\$89,686,406 80	\$258,767,494 26	\$161,410,198 97

TABLE No. 48—RECAPITULATION.
Showing the various items composing the Incomes of Fire and Marine Insurance Companies doing business in California on December 31, 1902.

	Fire Premiums.	Marine Premiums.	Interest on Mortgages.	Interest on Stocks and Bonds.	Rents.	All Other Sources.	Total Income.
California companies.....	\$3,525,030 58	\$535,500 87	\$33,316 52	\$181,119 51	\$33,195 31	\$849,856 61	\$5,158,679 40
Companies of other States.....	106,131,212 95	3,451,257 53	1,080,197 38	5,737,067 01	486,520 26	3,891,123 22	120,777,378 35
Companies of foreign countries.....	64,187,106 49	2,131,716 55	530,441 59	4,485,731 58	7,537,631 57	5,537,631 57	78,872,627 78
Marine companies.....	-----	26,594,856 99	655,469 11	1,887,603 33	-----	5,527,711 18	34,627,640 61
Totals.....	\$173,844,010 02	\$32,653,331 94	\$2,299,424 60	\$12,291,521 43	\$519,715 57	\$17,828,322 58	\$239,436,326 14

TABLE No. 49—RECAPITULATION.
Showing the various items composing the Expenditures of Fire and Marine Insurance Companies doing business in California on December 31, 1902.

	Fire Losses.	Marine Losses.	Dividends.	Commissions and Brokerage.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures.
California companies.....	\$1,653,802 95	\$342,907 76	\$156,000 00	\$687,204 29	\$365,989 55	\$88,434 97	\$323,085 35	\$3,617,424 87
Companies of other States.....	56,120,118 31	2,087,313 00	5,405,932 55	22,359,260 32	6,828,291 89	2,973,549 66	8,060,257 19	103,834,722 92
Companies of foreign countries.....	34,648,450 23	1,414,371 95	2,487,778 60	12,964,676 98	6,036,171 37	1,384,453 50	10,663,165 81	69,659,068 44
Marine companies.....	-----	19,193,737 95	2,725,708 67	1,532,561 73	1,897,748 71	291,124 20	5,065,476 21	39,706,357 47
Totals.....	\$92,422,371 49	\$23,038,330 66	\$10,775,419 82	\$37,543,703 32	\$15,188,201 52	\$4,737,562 33	\$24,111,984 56	\$207,817,573 70

TABLE No. 50—RECAPITULATION.

Showing amount of Risks Written, Premiums Received, and amount of Risks in Force on December 31, 1902, with Premiums thereon, of Fire and Marine Insurance Companies doing business in California.

	RISKS WRITTEN DURING THE YEAR.			
	Fire.	Premiums.	Marine.	Premiums.
California companies.....	\$399,577,124 00	\$4,981,002 04	\$150,243,869 00	\$1,137,537 55
Companies of other States.....	12,463,498,495 00	144,426,588 47	798,104,223 00	4,683,616 25
Companies of foreign countries.....	16,685,828,583 00	89,175,932 81	626,454,740 00	3,183,123 89
Marine companies.....	-----	-----	8,965,140,679 00	35,062,724 32
Totals.....	\$29,548,904,202 00	\$238,583,523 32	\$10,539,943,511 00	\$44,067,002 01
				\$282,650,525 33
	RISKS IN FORCE DECEMBER 31, 1902.			
	Fire.	Premiums.	Marine.	Premiums.
California companies.....	\$379,828,827 00	\$4,795,259 50	\$9,038,895 00	\$273,961 00
Companies of other States.....	15,012,350,543 00	165,294,208 46	41,231,138 00	1,485,269 44
Companies of foreign countries.....	13,909,563,420 00	79,137,125 64	43,382,937 00	455,292 32
Marine companies.....	-----	-----	710,859,007 00	9,034,534 29
Totals.....	\$29,301,742,790 00	\$249,226,593 60	\$804,511,977 00	\$11,248,987 05
				\$260,475,680 65

TABLE No. 51.

Showing the various items composing the Assets of Life Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Real Estate.	Loans on Mortgages.	Collateral Loans.	Premium Notes.	Stocks and Bonds.
Ætna Life	Hartford	\$669,543 12	\$27,303,046 82	\$1,009,024 17	\$396,153 38	\$24,924,364 74
Connecticut Mutual Life	Hartford	11,932,836 80	24,256,739 50	2,300 00	641,884 78	26,942,998 80
Conservative Life	Los Angeles	170,367 85	80,175 00		868,080 00	37,681 14
Equitable Life	New York	37,193,568 75	70,006,274 15	17,621,000 00		184,087,703 00
Fidelity Mutual Life	Philadelphia	1,396,550 00	235,679 45	135,813 59	171,054 16	1,775,238 15
Germania Life	New York	2,890,346 87	14,540,604 50			10,068,022 77
Home Life	New York	1,767,236 27	4,223,725 00	25,950 00	504,333 70	6,383,934 41
Manhattan Life	New York	4,955,283 15	6,146,210 00	834,024 04	349,858 04	3,543,648 75
Massachusetts Mutual Life	Springfield, Mass.	341,484 07	13,325,352 69		736,541 70	11,928,014 00
Metropolitan Life	New York	11,251,482 49	25,669,560 40		654,845 62	43,175,071 19
Minnesota Mutual Life	St. Paul.		97,700 00		3,493 70	926,610 96
Mutual Life	New York	32,833,323 45	81,566,584 60	10,278,000 00		220,140,306 02
Mutual Benefit Life	Newark	3,055,693 27	42,072,192 44	3,174,450 00	4,711,527 79	19,697,114 87
National Life	Montpelier, Vermont.	1,727,341 19	9,854,032 32	24,700 00	882,996 51	8,743,091 76
New England Mutual Life	Boston	2,378,653 99	9,597,666 67	1,729,195 00	228,030 17	17,538,950 00
New York Life	New York	12,880,000 00	26,125,318 09	4,104,000 00	2,664,475 59	225,039,235 46
Northwestern National Life	Minneapolis	31,143 88	276,115 00	8,282 10		115,439 36
Northwestern Mutual Life	Milwaukee	4,261,545 88	76,543,348 60		292,223 25	65,930,429 33
Pacific Mutual Life	San Francisco	389,397 92	1,180,115 65	175,900 00	34,125 77	2,967,372 00
Penn Mutual Life	Philadelphia	2,907,902 11	20,488,000 29	3,762,272 73	1,154,072 60	19,503,570 25
Phoenix Mutual Life	Hartford	777,882 01	8,977,510 17		250,988 55	4,144,108 60
Provident Life and Trust	Philadelphia	3,230,039 62	13,362,035 06	8,146,372 40	8,284 66	18,997,584 00
Provident Savings Life	New York	1,713,000 00	524,600 00	5,000 00	181,579 31	708,893 64
Prudential	Newark	11,863,588 51	10,996,983 27	4,736,750 00	179,694 63	24,467,744 45
State Life	Indianapolis		976,346 12	3,850 00	26,197 21	
Travelers	Hartford	1,193,531 62	7,415,963 86	630,043 83		23,424,841 85
Union Central Life	Cincinnati	321,591 92	27,360,063 09		1,108,336 01	10,975 00
Union Mutual Life	Portland, Maine	1,313,079 00	1,122,904 68	671,707 50	153,398 66	5,970,538 62
Washington Life	New York	6,409,479 21	7,853,900 00	105,000 00		369,080 58
Totals		\$159,805,892 95	\$532,178,717 42	\$57,173,635 36	\$16,202,175 79	\$971,562,623 70

TABLE No. 51—CONTINUED.

Name.	Location.	Cash in Office and Banks.	Interest Due and Accrued.	Net Uncollected Premiums.	All Other Assets.	Total Assets.
Etna Life	Hartford	\$5,297,111 02	\$897,462 66	\$675,166 25	\$2,392,433 45	\$63,494,305 61
Connecticut Mutual Life	Hartford	598,252 71	895,018 35	353,015 80	11,558 38	65,634,605 12
Conservative Life	Los Angeles	76,632 77	2,711 01	50,924 45		1,286,572 22
Equitable Life	New York	25,852,441 30	2,432,395 26	6,904,715 00	14,269,187 29	358,417,284 75
Fidelity Mutual Life	Philadelphia	202,689 58	26,858 78	366,383 00	360,383 00	4,670,548 40
Germania Life	New York	688,911 50	338,969 94	587,212 47	1,641,512 85	30,695,580 90
Home Life	New York	432,017 96	63,313 20	285,130 96	746,575 06	14,432,216 56
Manhattan Life	New York	146,605 23	140,427 89	248,052 94	906,829 09	17,270,939 13
Massachusetts Mutual Life	Springfield, Mass.	604,933 70	454,916 76	742,372 30	2,826,530 00	30,960,145 22
Metropolitan Life	New York	4,518,533 40	480,291 83	2,548,729 21	882,394 85	89,180,908 99
Minnesota Mutual Life	St. Paul	29,682 12	24,411 72	69,569 78	638,740 29	1,790,208 57
Mutual Life	New York	15,677,925 78	2,398,573 13	4,774,889 61	14,763,078 71	382,432,681 30
Mutual Benefit Life	Newark	839,733 50	1,339,569 56	933,202 37	6,987,009 75	82,810,493 55
National Life	Montpelier, Vermont	592,545 20	432,455 43	585,249 92	2,494,567 98	25,336,980 31
New England Mutual Life	Boston	482,214 44	166,007 35	593,877 06	1,717,622 40	34,432,217 08
New York Life	New York	22,622,057 83	1,845,560 67	5,441,303 68	22,118,888 71	322,840,900 03
Northwestern National Life	Minneapolis	112,077 93	7,465 89	153,419 69	3,073,356 46	3,777,300 31
Northwestern Mutual Life	Milwaukee	2,933,520 89	2,290,772 07	2,009,170 86	10,781,424 45	165,042,435 33
Pacific Mutual Life	San Francisco	188,632 52	76,611 95	246,729 16	325,844 36	5,594,729 33
Penn Mutual Life	Philadelphia	520,106 02	457,531 41	1,358,744 80	4,248,903 10	54,391,103 31
Phoenix Mutual Life	Hartford	409,174 51	181,559 25	251,112 31	706,877 00	15,689,212 40
Provident Life and Trust	Philadelphia	360,624 35	302,722 14	854,693 94	3,959,066 47	49,221,422 64
Provident Savings Life	New York	500,132 27	89,459 18	479,829 00	1,899,145 69	6,071,639 09
Prudential	Newark	4,916,069 51	351,952 18	1,812,795 96	919,791 36	60,245,339 87
State Life	Indianapolis	166,491 23	14,080 16	140,981 18	199,090 22	1,527,036 12
Travelers	Hartford	1,435,319 58	298,429 21	690,763 03	1,989,475 00	37,078,367 98
Union Central Life	Cincinnati	346,453 34	1,069,204 80	515,347 97	2,997,376 21	33,729,348 34
Union Mutual Life	Portland, Maine	43,475 35	65,792 81	231,055 86	65,312 86	9,637,285 34
Washington Life	New York	232,822 37	105,883 97	174,860 14	1,293,552 50	16,544,578 77
Totals		\$90,827,187 91	\$17,200,408 56	\$34,079,197 39	\$105,216,527 49	\$1,984,246,366 57

TABLE No. 52.

Showing the various items composing the Liabilities, Capital Stock not included, of Life Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Losses Adjusted and in Process of Adjustment.	Losses Resisted.	Net Value of Outstanding Policies.	Unpaid Dividends Due Policy Holders.	All Other Liabilities.	Total Liabilities.	Surplus as Regards Policy Holders.
Etna Life.	Hartford	\$211,116 00	\$22,820 00	\$52,929,701 00	\$826,587 61	\$3,017,774 82	\$57,007,909 43	\$6,486,306 18
Connecticut Mutual Life	Hartford	272,582 80	6,000 00	54,849,381 00	1,223,257 08	176,381 81	56,527,602 69	9,107,002 43
Conservative Life	Los Angeles	8,290 79		977,059 68	600,721 18		985,350 47	501,221 75
Equitable Life	New York	739,063 53	37,300 00	277,847,000 00	11,488 04	3,440,203 24	282,604,287 95	75,752,996 80
Fidelity Mutual Life	Philadelphia	83,848 05	11,000 00	3,800,659 00	41,599 73	133,870 24	4,040,865 99	629,682 41
Germania Life	New York	124,678 87	1,500 00	26,096,088 00	6,113 51	111,838 86	26,375,705 46	4,319,875 44
Home Life	New York	2,044 60	9,000 00	12,867,248 00	15,778 09	224,402 65	13,108,808 76	1,323,407 80
Manhattan Life	New York	21,654 00	20,000 00	15,271,779 00	254,141 88	179,036 81	15,508,247 90	1,762,691 23
Massachusetts Mutual Life	Springfield	85,076 00	13,000 00	27,785,713 00	35,885 54	215,404 09	28,353,334 97	2,606,810 25
Metropolitan Life	New York	114,474 50	52,212 20	76,800,699 00		1,814,181 29	78,817,452 53	10,363,456 46
Minnesota Mutual Life	St. Paul.	12,000 00	13,000 00	1,295,633 00		2,887 49	1,323,520 49	466,688 08
Mutual Life	New York	1,482,884 02	54,272 00	311,303,247 00	140,627 50	66,431,650 78	379,412,681 30	3,020,000 00
Mutual Benefit Life	Newark	194,044 38	41,500 00	74,461,293 00	279,180 40	1,202,942 65	76,178,960 43	6,631,533 12
National Life	Montpelier, Vt.	12,099 00	25,000 00	22,078,262 50	7,618 48	497,987 56	22,620,967 54	2,716,012 77
New England Mutual Life	Boston.	190,169 00	16,500 00	30,462,443 00	138,362 58	42,591 27	30,900,065 85	3,532,151 23
New York Life	New York	2,316,229 23	78,740 00	208,344,420 00	185,677 79	51,915,833 01	322,840,900 03	
Northwestern National Life	Minneapolis	82,965 42	9,450 60	3,313,729 00		23,285 03	3,429,460 05	347,840 26
Northwestern Mutual Life	Milwaukee	558,905 24	43,042 86	132,673,994 00	268,127 16	26,020,735 26	159,564,804 52	5,477,630 81
Pacific Mutual Life	San Francisco.	61,585 05	2,000 00	4,456,126 44		242,693 62	4,762,405 11	832,324 22
Penn Mutual Life	Philadelphia.	329,004 00		45,964,541 00	96,953 72	4,973,464 55	51,363,963 27	3,027,140 04
Phoenix Mutual Life	Hartford	39,582 00		14,730,963 00		223,518 00	14,994,063 00	705,149 40
Provident Life and Trust	Philadelphia	94,331 27		40,935,001 00	63,281 74	811,044 46	41,903,658 47	7,317,764 17
Provident Savings Life	New York	123,500 00	43,049 00	5,111,258 00	212 11	85,341 41	5,363,362 53	708,276 56
Prudential	Newark	235,283 24	20,001 04	46,587,241 00	39,368 11	3,841,441 15	50,723,934 54	9,521,405 33
State Life	Indianapolis.	16,500 00	10,000 00	1,143,517 54	864 48	5,367 69	1,176,249 71	350,786 41
Travelers	Hartford	131,591 54	70,000 00	28,572,442 81		3,048,377 26	31,822,411 61	5,255,956 37
Union Central Life	Cincinnati	55,669 00	33,000 00	28,331,178 00	13,848 39	247,873 38	28,681,568 77	5,047,779 57
Washington Mutual Life	Portland, Me.	95,349 69		8,780,007 00	5,101 94	31,284 29	8,911,742 92	725,522 42
Washington Life	New York	82,901 18		15,717,262 00		8,316 27	15,808,479 45	736,089 32
Totals.		\$7,777,452 40	\$632,987 70	\$1,633,487,886 97	\$4,304,797 06	\$168,969,731 61	\$1,815,172,855 74	\$169,073,510 83

TABLE No. 53.

Showing the various items composing the Incomes of Life Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Premiums.	Interest.	Rents.	All Other Sources.	Total Income.
Aetna Life.....	Hartford	\$8,404,466 74	\$2,377,624 26	\$37,172 80	\$1,997,536 29	\$12,816,800 09
Connecticut Mutual Life.....	Hartford	5,271,681 42	2,427,408 90	462,484 18	86 00	8,161,660 50
Conservative Life.....	Los Angeles	424,110 61	49,349 17	6,032 71	1,058 97	480,551 46
Equitable Life.....	New York	53,932,423 44	11,633,455 13	1,911,675 07	1,968,584 07	69,466,137 71
Fidelity Mutual Life.....	Philadelphia	2,716,287 95	133,762 56	83,143 22	5,572 11	2,938,765 84
Germania Life.....	New York	3,868,633 73	1,143,722 64	223,237 11	324,191 12	5,559,784 60
Home Life.....	New York	2,544,625 88	530,253 13	99,406 52	43,081 78	3,217,367 31
Manhattan Life.....	New York	2,254,266 35	566,757 59	246,171 18	59,324 26	3,126,519 38
Massachusetts Mutual Life.....	Springfield, Mass.	5,594,337 45	1,218,530 74	16,269 68	60,608 56	6,889,796 43
Metropolitan Life.....	New York	39,553,725 03	2,870,217 64	548,866 57	263,474 37	43,336,283 61
Minnesota Mutual Life.....	St. Paul.	488,434 96	66,848 11	-----	29,667 27	584,950 34
Mutual Life.....	New York	56,874,062 15	13,423,728 31	1,382,943 26	1,624,289 02	73,305,022 74
Mutual Benefit Life.....	Newark	11,932,942 39	3,469,329 36	189,572 59	20,325 59	15,612,169 84
National Life.....	Montpelier, Vermont.	4,926,022 09	931,096 32	137,738 50	2,327 22	5,997,184 13
New England Mutual Life.....	Boston	4,562,764 34	1,279,037 08	175,971 07	11,108 05	6,028,880 54
New York Life.....	New York	65,049,944 54	11,880,861 87	1,058,590 65	1,113,004 28	78,108,401 34
Northwestern National Life.....	Minneapolis	2,044,846 96	192,674 00	-----	63,622 54	2,301,143 50
Northwestern Mutual Life.....	Milwaukee	24,578,827 19	6,559,481 76	447,832 03	566,163 68	32,152,304 66
Pacific Mutual Life.....	San Francisco	1,473,235 85	197,817 06	21,599 35	584,707 67	2,277,359 93
Penn Mutual Life.....	Philadelphia	10,709,248 47	2,250,443 70	194,384 95	286,490 78	13,440,567 90
Phoenix Mutual Life.....	Hartford	2,763,862 03	81,208 27	41,768 48	80,468 52	3,567,307 30
Provident Life and Trust.....	Philadelphia	6,015,502 54	1,981,652 37	106,610 56	380,723 65	8,464,489 12
Provident Savings Life.....	New York	3,644,750 95	161,713 74	153,277 02	150,673 36	4,110,415 07
Prudential.....	Newark	31,138,717 47	1,648,264 82	644,148 82	221,188 77	33,552,319 88
State Life.....	Indianapolis	1,207,828 63	52,012 28	-----	842 62	1,260,683 53
Travelers.....	Hartford	8,284,901 88	1,503,858 02	101,161 67	315,345 68	10,205,267 25
Union Central Life.....	Cincinnati	6,081,519 22	1,804,672 42	17,633 70	131,110 37	8,034,985 71
Union Mutual Life.....	Portland, Maine	1,848,279 48	336,472 35	52,868 61	7,090 80	2,244,711 24
Washington Life.....	New York	2,733,960 02	495,243 51	343,549 59	8,617 22	3,581,370 34
Totals.....	-----	\$371,024,259 76	\$71,893,497 11	\$8,704,109 80	\$10,301,284 62	\$461,923,151 29

TABLE No. 54.

Showing the various items composing the Expenditures of Life Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Losses and Matured Endowments.	Surrendered Policies.	Dividends to Policy Holders.	Dividends to Stockholders.	Commissions.
Aetna Life.....	Hartford.....	\$4,527,770 37	\$435,766 72	\$714,443 26	\$175,000 00	\$1,004,967 06
Connecticut Mutual Life.....	Hartford.....	4,371,610 00	500,635 71	1,314,850 11	-----	409,167 92
Conservative Life.....	Los Angeles.....	135,700 00	367,134 41	-----	18,000 00	108,974 21
Equitable Life.....	New York.....	18,275,987 66	6,437,338 98	4,477,924 15	7,000 00	6,313,011 29
Fidelity Mutual Life.....	Philadelphia.....	1,133,318 97	50,257 86	-----	-----	387,297 06
Germania Life.....	New York.....	1,906,305 27	327,827 30	189,723 76	24,000 00	476,663 47
Home Life.....	New York.....	975,500 68	152,697 84	211,734 94	15,000 00	349,475 21
Manhattan Life.....	New York.....	1,454,774 75	236,537 74	51,384 56	16,000 00	344,297 63
Massachusetts Mutual Life.....	Springfield, Mass.....	1,843,929 71	318,845 47	785,138 19	-----	659,666 43
Metropolitan Life.....	New York.....	11,397,333 42	409,470 11	555,360 50	140,000 00	6,121,456 73
Minnesota Mutual Life.....	St. Paul.....	247,970 50	63,351 24	89,458 30	-----	31,375 77
Mutual Life.....	New York.....	23,398,346 52	3,186,221 18	2,486,790 32	-----	8,590,550 92
Mutual Benefit Life.....	Newark.....	5,514,429 50	1,360,377 86	1,801,228 03	-----	1,188,175 44
National Life.....	Montpelier, Vermont.....	1,281,560 41	481,120 47	129,426 38	-----	669,956 48
New England Mutual Life.....	Boston.....	2,200,869 51	449,148 21	527,540 39	-----	517,217 78
New York Life.....	New York.....	21,604,214 93	4,713,829 94	4,240,514 90	-----	8,364,518 69
Northwestern National Life.....	Minneapolis.....	475,757 60	30,796 55	24,905 18	-----	184,907 83
Northwestern Mutual Life.....	Milwaukee.....	7,511,545 40	1,861,976 74	4,180,268 13	-----	2,861,016 26
Pacific Mutual Life.....	San Francisco.....	396,922 43	89,380 51	134,699 50	26,775 00	377,286 87
Penn Mutual Life.....	Philadelphia.....	3,474,242 12	687,491 35	699,570 06	-----	1,571,387 73
Phoenix Mutual Life.....	Hartford.....	990,253 24	286,029 44	248,474 40	-----	335,280 97
Provident Life and Trust.....	Philadelphia.....	2,871,332 85	359,965 29	777,974 50	-----	552,464 22
Provident Savings Life.....	New York.....	1,276,020 26	206,889 54	123,203 95	6,974 80	516,755 90
Prudential.....	Newark.....	8,152,632 81	722,922 79	615,903 82	200,000 00	6,224,084 68
State Life.....	Indianapolis.....	153,905 96	19,305 55	30,491 80	-----	294,371 58
Travelers.....	Hartford.....	3,296,857 88	188,937 19	-----	150,000 00	1,650,134 09
Union Central Life.....	Cincinnati.....	1,814,848 53	397,709 71	374,769 13	-----	860,513 67
Union Mutual Life.....	Portland, Maine.....	813,366 50	106,687 35	60,152 02	10,000 00	276,689 22
Washington Life.....	New York.....	1,718,836 31	172,202 77	155,669 02	8,750 00	366,493 92
Totals.....	-----	\$133,216,144 09	\$24,620,855 82	\$25,039,190 12	\$797,499 80	\$51,608,159 02

TABLE No. 54—CONTINUED.

Name.	Location.	Salaries.	Medical Examiners' Fees.	All Other Payments.	Total Expenditures.
Aetna Life	Hartford	\$180,554 34	\$82,786 47	\$2,087,401 33	\$9,208,689 55
Connecticut Mutual Life	Hartford	166,617 55	24,037 11	841,533 70	7,628,452 10
Conservative Life	Los Angeles	24,312 35	6,829 71	52,894 42	713,845 10
Equitable Life	New York	987,999 51	570,292 61	5,637,672 71	42,707,226 91
Fidelity Mutual Life	Philadelphia	151,281 52	58,016 03	404,768 07	2,216,530 32
Germania Life	New York	103,434 65	41,714 67	489,429 78	3,559,098 90
Home Life	New York	110,471 33	37,265 24	331,605 83	2,183,751 07
Manhattan Life	New York	97,445 68	40,432 43	447,524 35	2,688,397 14
Massachusetts Mutual Life	Springfield, Mass.	139,373 93	53,183 50	368,785 66	4,168,922 89
Metropolitan Life	New York	1,659,003 38	785,901 18	7,428,583 54	28,497,108 86
Minnesota Mutual Life	St. Paul	36,732 99	3,585 73	100,637 84	573,112 37
Mutual Life	New York	891,048 26	733,369 18	4,863,981 20	44,150,307 58
Mutual Benefit Life	Newark	275,097 99	125,965 07	909,828 49	11,175,102 38
National Life	Montpelier, Vermont	99,868 29	54,579 48	424,122 44	3,140,633 95
New England Mutual Life	Boston	166,161 82	39,913 83	397,542 97	4,298,394 51
New York Life	New York	836,735 63	824,338 95	6,341,438 43	46,925,591 47
Northwestern National Life	Minneapolis	71,977 30	14,411 47	197,109 94	999,865 87
Northwestern Mutual Life	Milwaukee	456,236 20	171,349 36	1,282,245 86	18,324,697 95
Pacific Mutual Life	San Francisco	62,668 00	31,974 52	634,404 06	1,754,110 89
Penn Mutual Life	Philadelphia	224,091 67	132,371 96	854,143 53	7,643,298 42
Phoenix Mutual Life	Hartford	84,384 21	39,366 93	304,132 88	2,287,922 07
Provident Life and Trust	Philadelphia	264,537 92	26,968 52	291,702 70	5,144,941 00
Provident Savings Life	New York	235,150 35	69,593 03	527,564 53	2,963,152 36
Prudential	Newark	1,125,953 95	505,170 21	5,314,725 94	22,861,394 20
State Life	Indianapolis	67,856 25	22,535 72	121,000 67	708,467 53
Travelers	Hartford	233,937 85	139,860 37	1,014,178 02	6,673,905 40
Union Central Life	Cincinnati	135,171 23	60,483 95	530,563 57	4,184,059 79
Union Mutual Life	Portland, Maine	70,317 55	33,945 50	316,080 26	1,677,238 40
Washington Life	New York	118,512 01	48,064 45	564,494 94	3,153,023 42
Totals		\$9,076,993 71	\$4,778,302 18	\$43,080,097 66	\$292,217,242 40

TABLE No. 55.

Showing the Number and Amount of Policies, including additions, in force at the end of the previous year, and an Exhibit of the Policies Issued during the year, by Life Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	POLICIES IN FORCE DECEMBER 31, 1901.		POLICIES ISSUED AND REVIVED DURING THE YEAR.		TOTAL.	
		Number.	Amount.	Number.	Amount.	Number.	Amount.
Etna Life	Hartford	117,314	\$201,278,283 00	16,753	\$30,960,938 00	134,067	\$232,239,221 00
Connecticut Mutual Life	Hartford	69,016	163,680,144 00	4,121	10,868,219 00	73,137	174,548,363 00
Conservative Life	Los Angeles	6,069	10,101,301 00	1,862	6,390,737 00	7,871	16,492,038 00
Equitable Life	New York	409,296	1,179,276,725 00	102,502	281,249,944 00	511,798	1,460,526,669 00
Fidelity Mutual Life	Philadelphia	39,044	84,306,448 00	11,189	20,927,705 00	50,283	105,234,153 00
Germania Life	New York	52,030	86,929,112 00	8,436	14,838,441 00	60,466	101,767,553 00
Home Life	New York	32,422	59,046,669 00	7,896	14,060,505 00	40,318	73,707,174 00
Manhattan Life	New York	28,759	64,206,959 00	5,055	13,721,096 00	33,814	77,928,055 00
Massachusetts Mutual Life	Springfield, Mass.	61,674	146,106,721 00	11,619	25,434,586 00	73,293	171,541,307 00
Metropolitan Life	New York	6,008,662	881,491,451 00	1,976,152	312,990,338 00	7,984,814	1,194,481,789 00
Minnesota Mutual Life	St. Paul	5,348	14,160,629 00	1,086	2,442,247 00	6,434	16,602,876 00
Mutual Life	New York	488,613	1,241,688,430 00	92,557	206,676,185 00	581,150	1,448,364,615 00
Mutual Benefit Life	New York	120,869	294,368,513 00	20,232	43,188,696 00	141,101	337,557,209 00
National Life	Newark	53,392	108,573,050 00	10,913	21,094,122 00	64,305	129,667,172 00
New England Mutual Life	Montpelier, Vermont	48,660	126,172,422 00	8,370	19,538,685 00	57,030	145,711,107 00
New York Life	Boston	599,818	1,365,369,299 00	156,884	305,695,229 00	756,702	1,671,064,528 00
Northwestern National Life	New York	26,159	38,129,315 00	12,733	16,166,855 00	38,892	54,296,170 00
Northwestern Mutual Life	Minneapolis	246,376	583,036,305 00	33,153	81,015,772 00	279,529	664,052,077 00
Pacific Mutual Life	Milwaukee	18,515	34,076,805 00	9,944	14,208,768 00	28,459	48,285,573 00
Penn Mutual Life	San Francisco	99,083	242,051,662 00	29,729	69,632,777 00	128,812	311,684,439 00
Phoenix Mutual Life	Philadelphia	40,036	65,872,834 00	7,439	13,247,535 00	47,475	79,120,369 00
Provident Life and Trust	Hartford	49,321	141,974,722 00	6,995	18,097,535 00	56,316	160,072,257 00
Provident Savings Life	Philadelphia	31,455	93,832,136 00	19,088	35,371,913 00	50,543	129,204,049 00
Prudential	New York	170,443	195,708,909 00	76,566	87,909,889 00	247,009	283,618,798 00
State Life	Newark	10,169	33,615,656 00	8,848	20,159,216 00	19,017	53,774,872 00
Travelers	Indianapolis	45,912	114,691,241 00	7,608	17,162,993 00	53,520	131,854,234 00
Union Central Life	Hartford	91,696	168,034,471 00	17,974	35,701,108 00	109,670	203,735,579 00
Union Mutual Life	Cincinnati	35,284	52,945,044 00	7,383	10,104,659 00	42,667	63,049,703 00
Washington Life	Portland, Maine	30,204	58,585,454 00	7,450	15,231,226 00	37,654	73,816,680 00
Totals		9,035,629	\$7,849,910,710 00	2,680,517	\$1,764,087,919 00	11,716,146	\$9,613,998,629 00

TABLE No. 56.

Showing the Number and Amount of Policies which have ceased to be in force during the year, with the mode of their termination, of Life Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	BY DEATH.		BY EXPIRATION AND MATURITY.		BY SURRENDER.	
		Number.	Amount.	Number.	Amount.	Number.	Amount.
Etna Life	Hartford	1,583	\$2,711,285 00	1,428	\$2,067,717 00	1,048	\$1,756,726 00
Connecticut Mutual Life	Hartford	1,645	4,119,423 00	146	330,870 00	634	1,491,140 00
Conservative Life	Los Angeles	72	131,000 00			29	32,664 00
Equitable Life	New York	4,742	15,504,841 00	2,989	1,051,622 00	7,280	25,081,147 00
Fidelity Mutual Life	Philadelphia	453	1,138,847 00	153	450,376 00	97	155,091 00
Germania Life	New York	653	1,115,543 00	595	836,950 00	754	1,194,631 00
Home Life	New York	351	718,136 00	137	303,644 00	401	804,647 00
Manhattan Life	New York	447	1,125,382 00	175	430,690 00	452	789,471 00
Massachusetts Mutual Life	Springfield, Mass.	622	1,620,941 00	122	308,353 00	1,292	2,024,842 00
Metropolitan Life	New York	95,609	9,645,380 00	184	7,979 00	52,535	8,247,242 00
Minnesota Mutual Life	St. Paul	99	242,774 00	2	6,000 00	17	50,000 00
Mutual Life	New York	5,641	18,298,960 00	1,959	5,836,455 00	4,387	11,149,372 00
Mutual Benefit Life	Newark	1,663	4,401,787 00	1,436	3,387,405 00	2,022	4,662,745 00
National Life	Montpelier, Vermont	415	1,010,476 00	311	620,852 00	1,163	2,218,008 00
New England Mutual Life	Boston	688	1,965,940 00	168	418,194 00	839	1,998,266 00
New York Life	New York	5,327	15,684,294 00	35,633	64,195,406 00	7,876	19,999,793 00
Northwestern National Life	Minneapolis	413	561,942 00	14	48,000 00	460	849,250 00
Northwestern Mutual Life	Milwaukee	2,046	5,315,461 00	810	3,322,357 00	2,778	5,177,387 00
Pacific Mutual Life	San Francisco	159	371,605 00	21	51,894 00	180	382,694 00
Penn Mutual Life	Philadelphia	994	2,602,945 00	741	1,672,148 00	1,418	3,304,345 00
Phoenix Mutual Life	Hartford	521	812,227 00	189	290,046 00	637	1,331,409 00
Provident Life and Trust	Philadelphia	422	1,331,940 00	474	1,398,431 00	604	1,662,027 00
Provident Savings Life	New York	422	1,229,529 00	4,583	16,432,200 00	303	915,755 00
Prudential	Newark	1,350	1,497,328 00	8,852	12,135,359 00	1,571	2,060,238 00
State Life	Indianapolis	58	171,000 00	572	1,325,500 00	217	871,062 00
Travelers	Hartford	528	1,206,494 00	420	1,008,713 00	434	1,261,725 00
Union Central Life	Cincinnati	716	1,317,396 00	558	1,166,228 00	424	985,250 00
Union Mutual Life	Portland, Maine	366	671,530 00	594	908,422 00	263	433,999 00
Washington Life	New York	411	836,115 00	656	1,194,910 00	363	838,680 00
Totals		129,016	\$97,360,521 00	63,922	\$121,206,721 00	90,478	\$102,320,606 00

TABLE No. 56—CONTINUED.

Name.	Location.	BY LAPSE.		BY CHANGE AND DECREASE, AND NOT TAKEN.	
		Number.	Amount.	Number.	Amount.
Ætna Life.....	Hartford.....	3,143	\$5,937,049 00	2,663	\$6,003,467 00
Connecticut Mutual Life.....	Hartford.....	760	1,637,050 00	200	1,111,655 00
Conservative Life.....	Los Angeles.....	1,870	2,849,492 00	583	2,304,335 00
Equitable Life.....	New York.....	20,918	44,389,360 00	17,964	72,453,104 00
Fidelity Mutual Life.....	Philadelphia.....	5,108	11,227,822 00	808	2,164,445 00
Germania Life.....	New York.....	1,890	3,009,935 00	1,210	2,234,198 00
Home Life.....	New York.....	2,315	3,581,144 00	1,477	3,041,036 00
Manhattan Life.....	New York.....	1,612	5,152,941 00	831	2,910,266 00
Massachusetts Mutual Life.....	Springfield, Mass.....	2,029	3,934,607 00	1,720	4,948,762 00
Metropolitan Life.....	New York.....	1,137,949	194,897,014 00	246	7,868 00
Minnesota Mutual Life.....	St. Paul.....	436	1,065,471 00	424	1,049,396 00
Mutual Life.....	New York.....	25,969	61,701,961 00		10,629,208 00
Mutual Benefit Life.....	Newark.....	2,443	3,760,613 00	3,392	7,038,578 00
National Life.....	Montpelier, Vermont.....	2,162	4,493,723 00	1,466	3,022,415 00
New England Mutual Life.....	Boston.....	1,322	2,581,564 00	1,132	3,490,507 00
New York Life.....	New York.....	2,699	7,534,520 00		10,022,480 00
Northwestern National Life.....	Minneapolis.....	5,053	6,538,410 00	6,467	9,538,000 00
Northwestern Mutual Life.....	Milwaukee.....	5,346	10,821,392 00	3,943	11,935,122 00
Pacific Mutual Life.....	San Francisco.....	2,545	3,736,903 00	1,433	2,900,004 00
Penn Mutual Life.....	Philadelphia.....	5,851	12,766,608 00	4,977	15,228,378 00
Phoenix Mutual Life.....	Hartford.....	1,583	2,482,892 00	1,833	3,339,203 00
Provident Life and Trust.....	Philadelphia.....	1,426	3,605,221 00	249	925,403 00
Provident Savings Life.....	New York.....	671	1,680,844 00	4,336	10,786,088 00
Prudential.....	Newark.....	19,822	15,675,115 00	405	687,184 00
State Life.....	Indianapolis.....	1,412	3,314,000 00	3,531	8,551,614 00
Travelers.....	Hartford.....	1,656	3,239,270 00	554	1,977,211 00
Union Central Life.....	Cincinnati.....	4,885	8,856,137 00	3,222	8,864,263 00
Union Mutual Life.....	Portland, Maine.....	2,537	3,508,842 00	1,518	2,410,284 00
Washington Life.....	New York.....	4,342	9,916,088 00		
Totals.....		1,269,754	\$444,015,988 00	66,584	\$209,624,483 00

TABLE No. 57.

Summary of Assets, Liabilities, Incomes, Expenditures, etc., of Miscellaneous Companies doing business in California on December 31, 1902.

Name.	Location.	Capital Paid Up.	Assets.	Liabilities.	Incomes.	Expenditures.	Losses Incurred During the Year.	Net Surplus.
Etna Indemnity	Hartford	\$500,000 00	\$651,641 09	\$130,823 61	\$243,646 70	\$210,394 55	\$45,022 86	\$20,817 48
American Bonding	Baltimore	1,000,000 00	2,155,629 27	823,179 69	658,682 94	602,659 75	154,403 57	332,449 58
American Credit Indemnity	New York	800,000 00	1,483,185 04	748,152 76	1,571,855 74	1,258,207 75	635,258 24	295,032 28
American Surety	New York	2,500,000 00	5,523,727 94	1,024,213 66	1,410,498 44	1,252,770 74	343,829 53	1,999,514 28
California Title Insurance and Trust	San Francisco	250,000 00	416,961 43	25,000 00	130,350 34	61,401 89	221 95	141,961 43
City Trust Safe Deposit and Surety	Philadelphia	500,000 00	3,426,327 86	2,662,337 84	371,835 99	344,864 77	84,566 75	263,990 02
Continental Casualty	Hammond, Ind.	300,000 00	1,157,310 05	733,341 14	1,303,132 07	1,301,625 18	694,032 92	123,968 41
Employers Liability*	London	---	1,984,092 95	1,332,434 79	1,997,851 80	1,801,061 82	1,032,802 67	651,658 16
Fidelity and Casualty	New York	250,000 00	5,294,671 77	3,564,810 06	4,754,804 00	3,967,416 97	1,594,326 97	1,449,861 71
Fidelity and Deposit	Baltimore	2,000,000 00	5,790,565 88	914,332 31	1,542,772 15	1,463,900 58	306,663 51	2,876,233 57
Hartford Steam Boiler	Hartford	500,000 00	3,109,591 30	1,808,333 56	1,371,706 39	1,227,905 35	131,036 40	741,257 74
Lloyds Plate Glass	New York	250,000 00	725,230 28	251,527 58	459,424 77	402,614 98	148,144 23	223,702 70
London Guarantee & Accident*	London	---	1,330,427 78	910,350 94	1,154,276 74	1,048,358 61	566,516 70	420,076 84
Maryland Casualty	Baltimore	750,000 00	2,737,403 09	1,314,626 68	2,038,932 89	1,788,705 49	886,415 14	722,781 41
Metropolitan Plate Glass	New York	200,000 00	579,641 40	174,503 33	340,686 89	408,797 18	101,272 38	205,138 07
National Surety	New York	500,000 00	1,613,727 18	568,154 28	819,629 89	742,483 11	235,257 31	545,572 90
New Amsterdam Casualty	New York	314,400 00	644,302 02	269,736 83	472,792 74	410,374 02	188,411 88	60,165 19
New York Plate Glass	New York	100,000 00	545,731 45	245,931 60	444,556 62	352,307 13	120,416 63	199,799 85
North American Accident	Chicago	100,000 00	244,417 53	86,788 26	240,645 40	220,581 07	79,613 77	57,629 27
Ocean Accident and Guarantee*	London	---	2,095,617 21	866,944 66	1,556,122 85	1,293,202 76	692,347 39	1,228,672 55
Pacific Coast Casualty	San Francisco	50,000 00	85,878 88	16,552 35	1,989 45	3,823 53	---	19,326 53
Pacific Surety	San Francisco	250,000 00	379,873 05	78,291 77	119,037 03	91,944 62	43,371 86	51,581 28
Preferred Accident	New York	200,000 00	1,054,961 12	580,282 78	1,187,491 15	1,071,605 69	399,477 99	284,678 74
Standard Life and Accident	Detroit	250,000 00	1,549,302 14	92,915 74	1,377,786 87	1,198,129 63	657,782 72	316,386 40
Title Insurance and Guaranty	San Francisco	351,100 00	375,291 03	25,833 22	20,348 58	16,917 82	---	---
Title Insurance and Trust	Los Angeles	500,000 00	586,609 88	14,240 43	175,472 13	180,597 48	3,716 79	72,369 45
Union Casualty and Surety	St. Louis	250,000 00	548,366 81	225,292 18	553,563 28	584,572 88	262,124 47	73,074 63
United States Fidelity and Guaranty	Baltimore	1,650,900 00	3,220,327 95	1,244,329 03	1,622,359 77	1,565,438 45	528,709 71	325,068 92
Totals	---	\$14,316,400 00	\$49,700,818 38	\$21,633,260 68	\$27,942,253 25	\$24,819,663 80	\$9,935,744 34	\$13,702,799 89

* United States branch statement.

TABLE No. 58.

Showing the various items composing the Assets of Miscellaneous Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Real Estate.	Mortgage Loans.	Stocks and Bonds Owned.	Collateral Loans.	Cash in Office and in Banks.
Etina Indemnity	Hartford			\$326,125 82		\$299,704 62
American Bonding	Baltimore	\$69,569 26	\$46,461 19	1,446,626 00	\$189,275 61	146,953 98
American Credit Indemnity	New York			680,512 50		203,290 17
American Surety	New York			1,789,697 63	128,154 62	456,624 10
California Title Insurance and Trust	San Francisco	3,013,217 16	2,500 00	45,946 50		4,397 87
City Trust Safe Deposit and Surety	Philadelphia	37,283 54	185,903 54	46,728 00		396,284 56
Continental Casualty	Hammond, Indiana	623,350 00	37,300 00	146,517 39	1,633,198 74	137,228 08
Employers Liability*	London		272,610 87	1,478,576 25	100,000 00	2,889 29
Fidelity and Casualty	New York	621,160 53		3,840,641 00	285,000 00	82,522 61
Fidelity and Deposit	Baltimore	670,000 00		4,782,700 00		235,058 63
Hartford Steam Boiler	Hartford	24,450 00	598,220 00	2,001,905 00		155,986 20
Lloyds Plate Glass	New York	265,000 00		388,399 41		19,155 18
London Guarantee and Accident*	London			1,018,047 89		182,350 84
Maryland Casualty	Baltimore			2,292,849 17		88,115 38
Metropolitan Plate Glass	New York			500,294 50		43,064 96
National Surety	New York		2,973 00	1,125,092 00		216,451 91
New Amsterdam Casualty	New York	139,383 55		495,653 75		93,984 70
New York Plate Glass	New York			451,550 00		32,151 45
North American Accident	Chicago		74,550 00	82,438 13	8,000 00	30,844 22
Ocean Accident and Guarantee*	London			1,824,291 25		147,604 04
Pacific Coast Casualty	San Francisco			53,018 75		7,345 09
Pacific Surety	San Francisco	4,000 00	98,288 66	219,888 50		43,342 53
Preferred Accident	New York			826,142 50		127,914 87
Standard Life and Accident	Detroit	61,321 45	441,803 63	745,005 00		103,761 12
Title Insurance and Guarantee	San Francisco		403 00	100,000 00		24,888 03
Title Insurance and Trust	San Francisco	50,000 00	165,008 33	127,200 00		15,647 93
Union Casualty and Surety	St. Louis		45,350 00	327,350 00		16,639 81
United States Fidelity and Guaranty	Baltimore	116,909 56	54,100 00	2,245,188 59	144,935 00	177,362 78
Totals		\$5,695,645 05	\$2,025,472 22	\$29,768,355 53	\$2,488,563 97	\$3,491,264 95

*United States branch statement.

TABLE No. 58—CONTINUED.

Name.	Location.	Interest Due and Accrued.	Premiums in Course of Collection.	All Other Assets.	Total Assets.
Etna Indemnity	Hartford	\$4,276 88	\$21,055 08	\$478 69	\$651,641 09
American Bonding	Baltimore	15,851 70	85,528 35	155,363 18	2,155,629 27
American Credit Indemnity	New York	3,449 14	176,483 78	779,449 45	1,843,185 04
American Surety	New York	5,748 75	111,356 58	16,429 10	5,523,727 94
California Title Insurance and Trust	San Francisco	4,105 62	6,738 50	132,585 86	416,961 43
City Trust Safe Deposit and Surety	Philadelphia	18,598 97	13,485 82	297,381 77	3,426,327 86
Continental Casualty	Hammond, Indiana	11,705 74	389,765 21	99,482 76	1,157,310 05
Employers Liability*	London	12,101 25	289,089 13	201,737 03	1,984,092 95
Fidelity and Casualty	New York	4,074 97	397,698 08	33,574 58	5,264,671 77
Fidelity and Deposit	Baltimore		102,807 25		5,790,665 88
Hartford Steam Boiler	Hartford	15,337 91	313,692 19		3,109,591 30
Lloyds Plate Glass	New York		52,675 69		725,230 28
London Guarantee and Accident*	London	10,290 48	119,738 57		1,330,427 78
Maryland Casualty	Baltimore	11,262 84	295,180 70	100,000 00	2,787,408 09
Metropolitan Plate Glass	New York	1,940 00	31,895 66	2,446 28	579,641 40
National Surety	New York	6,600 00	71,239 17	51,987 55	1,613,727 18
New Amsterdam Casualty	New York	5,352 15	46,714 65	2,596 77	644,302 02
New York Plate Glass	New York		62,030 00		545,731 45
North American Accident	Chicago	629 81	44,868 13	3,087 24	244,417 53
Ocean Accident and Guarantee*	London	18,465 24	105,255 68		2,095,617 21
Pacific Coast Casualty	San Francisco	583 33	24,931 71		85,878 88
Pacific Surety	San Francisco	882 13	9,681 23	3,850 00	379,873 05
Preferred Accident	New York	6,026 25	104,877 50		1,064,961 12
Standard Life and Accident	Detroit	14,952 26	182,371 25	77 43	1,549,302 14
Title Insurance and Guarantee	San Francisco			250,000 00	375,291 03
Title Insurance and Trust	Los Angeles	3,753 62		225,000 00	586,509 88
Union Casualty and Surety	St. Louis	2,504 81	131,751 56	24,770 63	548,366 81
United States Fidelity and Guaranty	Baltimore	24,794 51	229,031 55	228,005 96	3,220,327 95
Totals		\$203,269 36	\$3,419,943 02	\$2,608,304 28	\$49,700,818 38

*United States branch statement.

TABLE No. 59.

Showing the various items composing the Liabilities, except Capital Stock, of Miscellaneous Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Losses Unadjusted.	Losses Resisted.	Unearned Premiums.	All Other Claims.	Total Liabilities.	Net Surplus.
Aetna Indemnity	Hartford	\$18,228 24	---	\$110,410 78	\$2,184 59	\$130,823 61	\$20,817 48
American Bonding	Baltimore	70,885 70	---	294,888 76	457,405 23	823,179 69	332,449 58
American Credit Indemnity	New York	50,246 00	\$3,416 00	694,490 76	---	748,152 76	295,032 28
American Surety	New York	248,974 00	107,588 39	667,651 27	---	1,024,213 66	1,999,514 28
California Title Insurance and Trust	San Francisco	---	---	---	25,000 00	25,000 00	141,961 43
City Trust Safe Deposit and Surety	Philadelphia	13,766 66	72,226 59	138,928 56	2,437,416 03	2,662,337 84	263,990 02
Continental Casualty	Hammond, Ind.	89,848 00	8,135 50	631,480 65	3,176 99	733,341 14	123,968 91
Employers Liability*	London	99,615 00	364,695 00	858,784 88	9,339 91	1,332,434 79	651,658 16
Fidelity and Casualty	New York	286,644 34	628,050 14	2,364,551 64	285,563 94	3,564,810 06	1,449,861 71
Fidelity and Deposit	Baltimore	31,012 45	166,021 99	717,297 87	---	914,332 31	2,376,233 57
Hartford Steam Boiler	Hartford	73,322 65	---	1,795,010 91	---	1,868,333 56	741,257 74
Lloyds Plate Glass	New York	4,370 99	---	236,901 57	10,255 02	251,527 58	223,702 70
London Guarantee and Accident*	London	96,041 00	256,000 00	467,311 79	90,998 15	910,350 94	420,076 84
Maryland Casualty	Baltimore	103,133 61	314,290 15	822,202 92	75,000 00	1,314,626 68	722,781 41
Metropolitan Plate Glass	New York	5,537 53	---	166,159 84	2,805 96	174,503 33	205,138 07
National Surety	New York	18,740 33	59,704 51	374,673 16	115,036 28	568,154 28	545,572 90
New Amsterdam Casualty	New York	15,155 00	42,309 17	203,529 66	8,743 00	263,736 83	60,105 19
New York Plate Glass	New York	6,946 82	---	230,012 55	8,972 23	245,931 60	199,799 85
North American Accident	Chicago	6,718 18	---	78,070 08	2,000 00	86,788 26	57,629 27
Ocean Accident and Guarantee*	London	39,181 00	221,370 00	560,103 52	46,290 14	866,944 66	1,228,672 55
Pacific Coast Casualty	San Francisco	---	---	16,552 35	---	16,552 35	19,326 53
Pacific Surety	San Francisco	2,500 00	27,500 00	48,291 77	---	78,291 77	51,581 28
Preferred Accident	New York	44,337 50	28,975 00	506,969 88	---	580,282 38	284,678 74
Standard Life and Accident	Detroit	52,150 00	278,424 02	592,357 10	---	982,915 74	316,386 40
Title Insurance and Guaranty	San Francisco	---	---	---	59,384 62	59,384 62	---
Title Insurance and Trust	Los Angeles	---	---	---	14,240 43	14,240 43	72,369 45
Union Casualty and Surety	St. Louis	22,580 00	14,500 00	165,666 68	22,545 50	225,292 18	73,074 63
United States Fidelity and Guaranty	Baltimore	45,539 07	131,784 98	799,544 83	267,460 15	1,244,329 03	325,098 92
Totals	---	\$1,445,474 07	\$2,724,991 44	\$13,542,543 78	\$3,970,251 39	\$21,683,260 68	\$13,702,799 89

* United States branch statement.

TABLE No. 60.

owing the various items composing the Incomes of Miscellaneous Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Premiums.	Interest.	Rents.	All Other Sources.	Total Income.
Et'na Indemnity	Hartford	\$201,729 52	\$12,728 08	-----	\$29,189 10	\$243,646 70
American Bonding	Baltimore	579,187 63	72,915 57	-----	6,579 74	658,682 94
American Credit Indemnity	New York	1,396,367 49	19,984 99	-----	155,503 26	1,571,855 74
American Surety	New York	1,093,606 69	71,519 62	\$245,372 13	-----	1,410,498 44
California Title Insurance and Trust	San Francisco	88,669 50	24,420 04	150 00	17,120 80	130,350 34
City Trust Safe Deposit and Surety	Philadelphia	223,184 76	124,425 07	17,268 76	6,957 40	371,835 99
Continental Casualty	Hammond, Ind.	1,288,188 06	14,714 26	-----	229 75	1,303,132 07
Employers Liability*	London	1,950,060 53	47,791 27	-----	-----	1,997,851 80
Fidelity and Casualty	New York	4,489,535 93	134,742 82	64,038 98	66,486 27	4,754,804 00
Fidelity and Deposit	Baltimore	1,227,994 24	175,845 90	43,296 28	95,635 73	1,542,772 15
Hartford Steam Boiler	Hartford	1,224,011 37	117,096 65	1,115 01	29,483 36	1,371,706 39
Lloyds Plate Glass	New York	423,632 15	12,236 17	13,577 62	9,978 83	459,424 77
London Guarantee and Accident*	London	1,116,004 87	38,171 87	-----	100 00	1,154,276 74
Maryland Casualty	Baltimore	1,898,100 38	84,293 47	-----	56,539 04	2,038,932 89
Metropolitan Plate Glass	New York	323,488 00	16,843 89	355 00	-----	340,686 89
National Surety	New York	760,868 59	40,576 83	5,060 81	13,123 66	819,629 89
New Amsterdam Casualty	New York	456,100 70	16,632 04	-----	-----	472,732 74
New York Plate Glass	New York	411,395 35	14,002 77	-----	19,158 50	444,556 62
North American Accident	Chicago	233,266 67	7,378 73	-----	-----	240,645 40
Ocean Accident and Guarantee*	London	1,503,388 68	32,709 52	-----	20,024 65	1,556,122 85
Pacific Coast Casualty	San Francisco	1,975 55	13 90	-----	-----	1,989 45
Pacific Surety	San Francisco	98,947 08	17,429 63	-----	2,600 32	119,037 03
Preferred Accident	New York	1,167,377 40	20,113 75	-----	-----	1,187,491 15
Standard Life and Accident	Detroit	1,925,847 53	50,488 17	676 25	774 92	1,977,786 87
Title Insurance and Guaranty	San Francisco	9,501 50	12 14	-----	-----	20,348 58
Title Insurance and Trust	Los Angeles	11,316 80	15,879 28	-----	10,834 58	175,472 13
Union Casualty and Surety	St. Louis	541,816 66	11,746 62	-----	148,276 05	553,503 28
United States Fidelity and Guaranty	Baltimore	1,515,912 92	68,583 52	2,003 47	35,859 86	1,622,359 77
Totals	-----	\$25,561,526 55	\$1,263,296 57	\$392,914 31	\$724,515 82	\$27,942,253 25

* United States branch statement.

TABLE No. 61.

Showing the various items composing the Expenditures of Miscellaneous Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Losses.	Dividends.	Brokerage and Commissions.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures.
Ethna Indemnity	Hartford	\$51,386 80	-----	\$46,962 61	\$15,442 64	\$6,631 48	\$89,971 02	\$210,394 55
American Bonding	Baltimore	154,403 57	\$80,000 00	120,698 71	58,188 07	32,173 81	157,195 59	602,659 75
American Credit Indemnity	New York	635,258 24	86,000 00	378,438 10	61,814 70	17,347 44	79,349 27	1,268,207 75
American Surety	New York	265,529 75	200,000 00	58,338 30	195,922 64	23,422 51	509,557 54	1,252,770 74
California Title Insurance and Trust.	San Francisco	221 95	15,000 00	2,862 50	23,206 80	1,271 04	18,839 60	61,401 89
City Trust Safe Deposit and Surety	Philadelphia	65,044 85	29,952 00	15,207 48	67,467 89	15,469 80	151,122 75	344,864 77
Continental Casualty	Hammond, Ind.	644,850 36	30,000 00	223,884 22	97,217 57	23,578 46	282,094 57	1,301,625 18
Employers Liability*	London	946,670 03	-----	491,829 77	38,534 98	37,326 04	287,701 00	1,801,061 82
Fidelity and Casualty	New York	1,822,014 25	62,500 00	1,178,194 60	282,827 88	81,450 99	540,429 25	3,967,416 97
Fidelity and Deposit	Baltimore	454,906 97	279,933 00	334,248 12	99,014 75	57,896 88	237,840 86	1,463,900 58
Hartford Steam Boiler	Hartford	108,164 96	60,000 00	317,918 81	58,400 00	40,819 89	642,601 69	1,227,905 35
Lloyds Plate Glass	New York	150,091 44	26,250 00	137,008 52	49,095 70	17,402 03	22,767 29	402,614 98
London Guarantee & Accident*	London	566,516 70	-----	305,735 48	51,682 64	23,232 98	101,190 81	1,048,358 61
Maryland Casualty	Baltimore	886,415 14	75,000 00	521,386 99	64,965 63	47,024 82	193,912 91	1,788,705 49
Metropolitan Plate Glass	New York	100,275 61	120,000 00	110,469 56	37,887 00	9,789 32	30,375 69	408,797 18
National Surety	New York	217,634 35	50,000 00	118,969 53	119,428 34	17,291 13	219,159 76	742,483 11
New Amsterdam Casualty	New York	188,411 88	-----	131,127 73	39,514 43	7,678 12	43,641 86	410,374 02
New York Plate Glass	New York	116,704 65	10,000 00	159,886 08	30,515 83	9,266 49	25,934 08	352,307 13
North American Accident	Chicago	74,920 98	-----	72,067 63	41,049 34	5,704 87	26,838 25	220,581 07
Ocean Accident and Guarantee*	London	596,240 82	-----	366,701 57	124,024 01	30,055 23	176,181 13	1,293,202 76
Pacific Coast Casualty	San Francisco	-----	-----	592 67	1,168 00	35 00	2,027 86	3,823 53
Pacific Surety	San Francisco	21,621 86	15,000 00	21,786 77	15,650 00	4,134 55	13,751 44	91,944 62
Preferred Accident	New York	412,815 49	12,000 00	359,271 32	79,625 25	21,976 52	185,917 11	1,071,605 69
Standard Life and Accident	Detroit	595,887 69	25,000 00	356,444 97	58,192 92	37,493 66	122,110 39	1,195,129 63
Title Insurance and Guaranty	San Francisco	-----	3,159 90	333 95	7,035 50	-----	6,388 47	16,917 82
Title Insurance and Trust	Los Angeles	3,716 79	25,000 00	-----	72,486 01	724 05	28,670 63	130,597 48
Union Casualty and Surety	St. Louis	262,124 47	-----	158,479 80	34,438 56	14,150 55	115,379 50	584,572 88
United States Fidelity and Guaranty	Baltimore	526,285 74	115,536 00	395,011 99	121,047 66	49,658 40	357,898 66	1,565,438 45
Totals	-----	\$9,867,715 34	\$1,320,390 90	\$6,383,857 78	\$1,945,844 74	\$632,006 06	\$4,668,848 98	\$24,819,663 80

* United States branch statement.

TABLE No. 62.

Showing the various items composing the Assets of Assessment Life Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Mortgage Loans.	Stocks and Bonds.	Cash in Office and in Banks.	Deposited for Protection of Policy Holders.	Guarantee Notes.	Interest Due and Accrued.	All Other Assets.	Total Assets.
Bankers Life Association	Des Moines, Ia.	\$4,235,205 21	\$291,586 38	\$150,241 49	-----	\$728,217 77	\$114,567 36	\$78,000 00	\$5,597,818 21
Decimal Mutual Life	San Francisco	-----	-----	283 00	\$10,000 00	-----	-----	-----	10,283 00
Fidelity Mutual Aid Ass'n.	San Francisco	283 70	1,122 50	15,141 16	6,000 00	-----	-----	2,027 59	24,574 95
Totals	-----	\$4,235,488 91	\$292,708 88	\$165,665 65	\$16,000 00	\$728,217 77	\$114,567 36	\$80,027 59	\$5,632,676 16

TABLE No. 63.

Showing the various items composing the Liabilities of Assessment Life Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Losses Unpaid.	All Other Liabilities.	Total Liabilities.
Bankers Life Association	Des Moines, Iowa	\$78,000 00	\$2,700 00	\$80,700 00
Decimal Mutual Life	San Francisco	-----	12,499 35	12,499 35
Fidelity Mutual Aid Association	San Francisco	405 00	144 15	549 15
Totals	-----	\$78,405 00	\$15,343 50	\$93,748 50

TABLE No. 64.

Showing the various items composing the Incomes of Assessment Life Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Membership Fees.	Annual Dues.	Assessments.	Interest and Rent.	All Other Sources.	Total Income.
Bankers Life Association	Des Moines, Iowa	\$227,985 00	-----	\$1,337,239 01	\$229,064 66	\$397,541 40	\$2,191,830 07
Decimal Mutual Life	San Francisco	-----	\$344 00	-----	-----	344 00	344 00
Fidelity Mutual Aid Association	San Francisco	291 00	70,311 68	-----	427 17	-----	71,029 85
Totals	-----	\$228,276 00	\$70,655 68	\$1,337,239 01	\$229,491 83	\$397,541 40	\$2,263,203 92

TABLE No. 65.

Showing the various items composing the Expenditures of Assessment Life Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	Losses and Claims.	Commissions.	Commission for Collecting Assessments.	Salaries of Managers and Agents.	Office Salaries.
Bankers Life Association	Des Moines, Iowa	\$1,019,100 11	\$220,975 99	\$36,240 88	\$7,742 95	\$52,444 61
Decimal Mutual Life	San Francisco	25,852 61	3,502 30	942 06	13,363 87	350 00
Fidelity Mutual Aid Association	San Francisco	\$1,044,952 72	\$224,478 29	\$37,182 94	\$21,106 82	13,757 53
Totals						\$66,552 14
Name.	Location.	Medical Exam- iners' Fees.	Rents, Taxes, Etc.	All Other Expenditures.	Total Expenditures.	
Bankers Life Association	Des Moines, Iowa	\$34,825 35	\$19,003 92	\$69,585 41	\$1,459,919 22	
Decimal Mutual Life	San Francisco	347 10	4,422 32	30 00	380 00	
Fidelity Mutual Aid Association	San Francisco	\$35,172 45	\$23,426 24	9,089 45	71,277 24	
Totals				\$78,704 86	\$1,531,576 46	

TABLE No. 66.

Showing amount of Risks Written, Risks Terminated, and Risks in Force at the end of the year, of Assessment Life Insurance Companies doing business in California on December 31, 1902.

Name.	Location.	IN FORCE DECEMBER 31, 1901.		RISKS WRITTEN DURING THE YEAR.		RISKS TERMINATED.		IN FORCE DECEMBER 31, 1902.	
		No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
Bankers Life Association	Des Moines, Ia.	79,883	\$159,766,000 00	12,761	\$25,522,000 00	3,377	\$6,754,000 00	89,267	\$178,534,000 00
Decimal Mutual Life	San Francisco	22	22,000 00	None	None	None	None	22	22,000 00
Fidelity Mutual Aid Association	San Francisco	4,105	4,327,000 00	7,925	8,037,000 00	7,593	7,789,500 00	4,437	4,574,500 00
Totals		84,010	\$164,115,000 00	20,686	\$33,559,000 00	10,970	\$14,543,500 00	93,726	\$183,130,500 00

TABLE No. 67.

Statement of Office Collections, showing amounts collected from the different Companies, for the year ending December 31, 1902, for filing and certifying copies of papers, taxes, and substitution of securities.

Name.	Amount.	Name.	Amount.
Fireman's Fund.....	\$20 00	Amount brought forward...	\$31,105 41
Home Fire and Marine.....	20 00	North German Fire.....	201 74
Occidental.....	20 00	Northwestern National.....	2,324 90
Humboldt County Fire.....	1 00	Orient.....	20 00
Los Angeles County Mutual Fire.....	1 00	Pelican.....	206 79
Orange County Farmers Mutual Fire.....	1 00	Pennsylvania Fire.....	2,598 90
Sacramento County Patrons and Farmers Mutual Fire.....	5 00	Phenix.....	618 23
San Bernardino County Mutual Fire.....	1 00	Phenix.....	30 00
Santa Barbara County Farmers Mutual Fire.....	5 00	Providence-Washington.....	20 00
Santa Clara County Fire.....	1 00	Queen.....	1,066 91
Scandinavian Mutual Protective Fire.....	1 00	Reading Fire.....	282 61
Sonoma County Farmers Mutual Fire.....	1 00	Rochester German.....	65 00
Ventura County Mutual Fire.....	1 00	Springfield Fire and Marine.....	1,486 98
Etna.....	20 00	St. Paul.....	1,228 40
Agricultural.....	421 70	Teutonia.....	170 00
American.....	656 30	Traders.....	1,666 12
American.....	658 23	Union.....	352 21
American Central.....	817 97	United Firemen's.....	188 18
American Fire.....	1,416 28	United States Fire.....	218 82
American Fire.....	289 98	Victoria Fire.....	87 55
Assurance Company of America.....	80 40	Westchester Fire.....	829 09
Caledonian-American.....	257 84	Williamsburg City Fire.....	607 29
Citizens.....	516 75	German Fire.....	65 00
Commercial Union Fire.....	81 96	Globe and Rutgers Fire.....	65 00
Connecticut Fire.....	20 00	National Union Fire.....	65 00
Continental.....	1,748 96	Aachen and Munich Fire.....	20 00
Delaware.....	594 08	Alliance.....	20 00
Dutchess.....	504 72	Atlas.....	20 00
Equitable Fire and Marine.....	20 00	Baloise Fire.....	20 00
Fire Association.....	1,401 69	British America.....	20 00
Firemen's.....	365 00	Caledonian.....	26 00
Franklin Fire.....	1,487 37	Commercial Union.....	20 00
German.....	2,171 01	Hamburg-Bremen Fire.....	20 00
German Alliance.....	318 99	Helvetia Swiss Fire.....	20 00
German-American.....	1,502 89	Imperial.....	20 00
Germania Fire.....	1,023 36	Law Union and Crown.....	20 00
Girard Fire and Marine.....	91 51	Liverpool and London and Globe.....	20 00
Glens Falls.....	493 88	London.....	30 00
Greenwich.....	228 03	London and Lancashire Fire.....	20 00
Hanover Fire.....	942 58	Manchester.....	27 50
Hartford Fire.....	30 00	Netherlands Fire and Life.....	30 00
Home.....	3,299 90	New Zealand.....	20 00
Indemnity Fire.....	47 84	North British and Mercantile.....	20 00
Insurance Company of North America.....	3,671 71	Northern.....	30 00
Insurance Company of the State of Pennsylvania.....	336 94	North German Fire.....	20 00
Kings County Fire.....	119 91	Norwich Union Fire.....	20 00
Mercantile Fire and Marine.....	135 69	Palatine.....	20 00
Merchants.....	1,121 23	Phenix.....	20 00
Michigan Fire and Marine.....	570 88	Prussian National.....	20 00
Milwaukee Mechanics.....	2,412 03	Rhine and Moselle Fire.....	65 00
National Fire.....	20 00	Royal.....	20 00
National Standard.....	72 96	Royal Exchange.....	50 00
New Hampshire Fire.....	30 00	Scottish Union and National.....	20 00
New York Fire.....	134 64	State Fire.....	20 00
Niagara Fire.....	892 20	Sun Fire.....	20 00
		Svea.....	20 00
		Thuringia.....	20 00
		Transatlantic Fire.....	20 00
		Union.....	20 00
		Western.....	20 00
		Alliance.....	21 50
		Alliance Marine.....	20 00
Amount carried forward.....	\$31,105 41	Amount carried forward.....	\$46,430 13

TABLE No. 67—CONTINUED.

Name.	Amount.	Name.	Amount.
Amount brought forward.....	\$46,430 13	Amount brought forward.....	\$49,670 73
American and Foreign Marine.....	20 00	Penn Mutual Life.....	6,716 60
Australian Alliance.....	65 00	Phoenix Mutual Life.....	20 00
Baloise.....	20 00	Provident Life and Trust.....	75 00
Bavarian Lloyd.....	65 00	Provident Savings Life.....	20 00
Boston.....	20 00	Prudential.....	30 00
British and Foreign Marine.....	20 00	Security Life and Trust.....	131 06
Canton.....	20 00	State Life.....	20 00
China Traders.....	20 00	Travelers.....	20 00
Fonciere.....	20 00	Union Central Life.....	1,345 68
Frankfort Marine and Accident.....	20 00	Union Mutual Life.....	1,433 28
Helvetia General.....	20 00	Washington Life.....	20 00
Imperial Marine.....	20 00	Northwestern National Life.....	20 00
Indemnity Mutual Marine.....	20 00	Continental Casualty.....	65 00
London and Provincial Marine.....	20 00	Employers Liability.....	20 00
Mannheim.....	20 00	Fidelity and Casualty.....	20 00
Man On.....	20 00	Frankfort-American.....	20 00
Marine.....	20 00	London Guarantee and Acci-	
Maritime.....	20 00	dent.....	20 00
North China.....	20 00	Maryland Casualty.....	903 32
Ocean Marine.....	20 00	New Amsterdam Casualty.....	30 00
Po On.....	20 00	North American Accident.....	40 00
Reliance Marine.....	20 00	Preferred Accident.....	20 00
Sea.....	20 00	Standard Life and Accident.....	522 56
Standard Marine.....	20 00	Union Casualty and Surety.....	263 79
Switzerland General.....	20 00	Ætna Indemnity.....	30 00
Thames and Mersey.....	20 00	American Bonding.....	132 91
Union Marine.....	20 00	American Surety.....	30 00
Universo.....	20 00	City Trust Safe Deposit and	
Wilhelma.....	20 00	Surety.....	30 00
Yangtse.....	20 00	Empire State Surety.....	20 00
Federal.....	65 00	Fidelity and Deposit.....	1,166 34
Ætna Life.....	20 00	National Surety.....	20 00
Connecticut Mutual Life.....	20 00	Pacific Surety.....	50 00
Conservative Life.....	20 00	United States Fidelity and	
Equitable Life.....	20 00	Guaranty.....	918 61
Fidelity Mutual Life.....	2,055 60	Lloyds Plate Glass.....	20 00
Germania Life.....	20 00	Metropolitan Plate Glass.....	20 00
Home Life.....	30 00	New York Plate Glass.....	20 00
Manhattan Life.....	20 00	Hartford Steam Boiler.....	20 00
Massachusetts Mutual Life.....	20 00	California Title Insurance and	
Metropolitan Life.....	30 00	Trust.....	20 00
Minnesota Mutual Life.....	65 00	Title Insurance and Guaranty.....	35 00
Mutual Life.....	20 00	Title Insurance and Trust.....	20 00
Mutual Benefit Life.....	20 00	American Credit Indemnity.....	20 00
National Life.....	20 00	Ocean Accident and Guarantee.....	20 00
New England Mutual Life.....	20 00	Bankers Life Association.....	20 00
New York Life.....	20 00	Decimal Mutual Life.....	20 00
Northwestern Mutual Life.....	20 00	Fidelity Mutual Aid.....	20 00
Pacific Mutual Life.....	45 00	Pacific Coast Casualty.....	35 00
Amount carried forward.....	\$49,670 73	Total.....	\$64,134 88

I certify the foregoing to be a full, true, and correct statement of the receipts of the Insurance Department of the State of California for the year nineteen hundred and two.

M. M. RHORER,
Deputy Insurance Commissioner.

Subscribed and sworn to before me, this 29th day of July, A. D. 1903.

[NOTARIAL SEAL.]

JAMES L. KING,
Notary Public in and for the City and County
of San Francisco, State of California.

THIRTY-SIXTH ANNUAL REPORT

OF THE

INSURANCE COMMISSIONER

OF THE

STATE OF CALIFORNIA

YEAR ENDING DECEMBER 31, 1903

E. MYRON WOLF, Insurance Commissioner



SACRAMENTO:

W. W. SHANNON, : : : : SUPERINTENDENT STATE PRINTING.
1905.

THIRTY-SIXTH ANNUAL REPORT

OF THE

INSURANCE COMMISSIONER OF THE STATE OF CALIFORNIA

INSURANCE DEPARTMENT,

SAN FRANCISCO, August 1, 1904.

To His Excellency, GEORGE C. PARDEE,

Governor of the State of California:

SIR: In compliance with the provisions of Section 595 of the Political Code, I submit herewith the thirty-sixth Annual Report of the Insurance Department of the State of California, showing the condition of insurance business in this State for the year ending December 31, 1903.

The total number of companies authorized to transact insurance business in the State during the said year was 212. Of these, 133 were fire and marine companies; thirty-three legal reserve life insurance companies; three assessment life, health, and accident insurance companies; thirty-three miscellaneous companies, and ten county fire mutuals.

Of the 133 fire and marine insurance companies, eighty-four transact only fire business; thirty-three do purely marine business, and sixteen transact both fire and marine. Two of these are California companies; sixty-six are companies organized in other States of the Union, and sixty-five companies are from foreign countries.

Of the three assessment life, health, and accident companies, one company, organized in another State, does a life insurance business. The remaining two are incorporated under the laws of California, but only one of these is actively engaged in business and confines itself to health and accident insurance.

Of the miscellaneous companies, sixteen transact health and accident business; four do burglary business; nine, employers' liability business; twelve, fidelity and surety business; eight, plate-glass business; two, credit insurance business; three, steam-boiler insurance business; four, title insurance business.

The insurance business done during the year 1903 exceeded that of 1902 in every branch with the exception of marine and industrial life insurance. While the amount of insurance of the latter character written, and the premiums received in 1903, were less than those of the preceding year and fewer policies were issued, the amount in force at the close of the year was greater than that at the close of the preceding year.

FIRE INSURANCE.

The amount of fire insurance written by the companies during the year 1903 was greater than that of the preceding year by \$36,426,531.00; the premiums received showed an increase of \$948,370.51, and the losses paid were more than those paid out in the previous year by \$1,687,484.02. The comparative figures are as follows:

Amount written, 1903.....	\$522,928,503 00
Amount written, 1902.....	486,501,972 00
Increase	\$36,426,531 00
Premiums received, 1903.....	\$8,288,354 90
Premiums received, 1902.....	7,339,984 39
Increase	\$948,370 51
Losses paid, 1903.....	\$4,342,785 60
Losses paid, 1902.....	2,655,301 58
Increase	\$1,687,484 02

Five new fire insurance companies were admitted and authorized to transact business in this State during the year; namely, Western Underwriters' Association, Inc., of Chicago; Spring Garden, of Philadelphia; Concordia Fire, of Milwaukee; Upper Rhine, of Mannheim; Austrian Phoenix, of Vienna.

The following figures, in reference to fire insurance business for the year, indicate the amount of risks written, premiums received, losses paid, and the ratio of losses to premiums, comparing the business done by California companies, companies of other States, and companies of foreign countries, and the total thereof:

	California Companies.	Companies of Other States.	Companies of Foreign Countries.	Totals.
Risks written...	\$38,016,887 00	\$254,571,365 00	\$230,350,251 00	\$522,928,503 00
Premiums rec'd	669,681 04	4,036,864 07	3,581,809 79	8,288,354 90
Losses paid...	315,569 93	2,123,241 19	1,903,947 48	4,342,785 60
Ratio of losses to premiums.	47.1	52.2	53.2	52.4

It will be seen that 7.3 per cent of the fire business was written by California companies, with a loss ratio of 47.1 per cent; 48.6 per cent by companies of other States, with a loss ratio of 52.2 per cent; and 44.1 per cent by companies of foreign countries, with a loss ratio of

53.2 per cent: the general average of losses to premiums being 52.4 per cent.

The risks in force at the close of last year were \$781,122,235, showing an increase of \$53,215,172 over the amount of risks in force at the close of the preceding year.

During the past twenty years the fire insurance companies have collected in premiums, in California, more than \$119,500,000, and have paid out in losses over \$53,000,000, as is shown by the following table:

		Premiums Received.	Losses Paid.	Ratio of Losses to Premiums.
Year ending	December 31, 1884....	\$4,538,062 44	\$1,295,594 48	28.5
Year ending	December 31, 1885....	4,540,883 39	2,033,257 05	44.8
Year ending	December 31, 1886....	5,185,772 23	2,654,371 08	51.2
Year ending	December 31, 1887....	5,590,353 89	2,101,482 52	37.6
Year ending	December 31, 1888....	6,087,041 48	3,049,030 42	50.1
Year ending	December 31, 1889....	6,158,754 64	2,572,001 93	41.7
Year ending	December 31, 1890....	6,303,324 05	2,753,392 22	43.7
Year ending	December 31, 1891....	6,669,998 72	2,408,156 05	36.1
Year ending	December 31, 1892....	6,975,185 15	2,715,819 95	38.9
Year ending	December 31, 1893....	6,780,453 93	2,667,160 24	39.4
Year ending	December 31, 1894....	6,336,734 55	2,815,671 30	44.4
Year ending	December 31, 1895....	4,704,584 11	2,850,672 07	60.6
Year ending	December 31, 1896....	3,817,316 18	2,645,397 45	69.3
Year ending	December 31, 1897....	4,767,019 28	2,637,706 71	55.3
Year ending	December 31, 1898....	6,657,887 55	3,578,294 69	53.7
Year ending	December 31, 1899....	5,545,260 51	2,882,973 60	52.0
Year ending	December 31, 1900....	5,795,506 75	2,430,242 35	41.9
Year ending	December 31, 1901....	7,522,401 88	2,344,581 05	31.2
Year ending	December 31, 1902....	7,339,984 39	2,655,301 58	36.2
Year ending	December 31, 1903....	8,288,354 90	4,342,785 60	52.4
Grand total for 20 years.....		\$119,604,880 02	\$53,433,892 34	44.6

The ratio of losses to premiums on fire risks for the twenty-nine years next preceding was:

1875.....28.3	1882.....39.9	1889.....41.7	1896.....69.3
1876.....32.2	1883.....39.1	1890.....43.7	1897.....55.3
1877.....31.0	1884.....28.5	1891.....36.1	1898.....53.8
1878.....26.3	1885.....44.8	1892.....38.9	1899.....52.0
1879.....32.5	1886.....51.2	1893.....39.4	1900.....41.9
1880.....32.5	1887.....37.6	1894.....44.4	1901.....31.2
1881.....33.3	1888.....50.1	1895.....60.6	1902.....36.2
			1903.....52.4

County Fire Mutuals.—The ten county fire mutuals, operating in accordance with the provisions of the act approved April 1, 1897, had a total amount of insurance in force on December 31, 1903, of \$4,982,502.75; an increase of \$1,632,745.75 over the amount in force at the close of the previous year. There was also an increase in the amount written to the extent of \$624,353; the amount written during the year 1903 being \$1,801,627, and the amount written in 1902 being \$1,177,274.

The losses paid were less than those of the preceding year by \$1,869.99, the figures for 1903 being \$4,093.35, while those for 1902 were \$5,963.34.

MARINE INSURANCE.

As previously indicated, the amounts of insurance written and premiums received by the marine companies in 1903 were less than the returns of the preceding year. The amount written in 1903 was \$210,567,904 and that of 1902 was \$212,601,297; a decrease of \$2,033,393.

The premiums received in 1903 were \$1,511,365.30, and those received in 1902 were \$1,692,599.26; a decrease of \$181,233.96.

The losses paid in 1903 were \$1,034,522.92, and those of 1902 were \$1,074,070.22; a decrease of \$39,547.30.

In the last report of this Department it was pointed out that while San Francisco had become of greater importance as a commercial point each year, marine insurance business was about the same as it had been for many years past, for the reason that nearly all of the steamship companies owning vessels plying in and out of San Francisco are organized and controlled outside of the State, and the tendency of these corporations is to either carry their own insurance or place it outside of the State of California, while the coasting fleet is running practically without insurance. In addition, much of the Oriental business is from and with Atlantic ports and is insured on the Atlantic side. Furthermore, there was some shrinkage in the volume of coasting business done during the year.

The following summary shows the marine business for the year 1903, giving the amount of risks written, premiums received, losses paid, and the ratio of losses to premiums of California companies, companies of other States and foreign countries, and the total thereof:

	California Companies.	Companies of Other States.	Companies of Foreign Countries.	Totals.
Amount written.	\$31,541,270 00	\$11,527,261 00	\$167,499,373 00	\$210,567,904 00
Premium rec'd..	271,580 87	135,715 77	1,104,068 66	1,511,365 30
Losses paid.....	142,228 54	82,349 04	809,845 34	1,034,522 92
Ratio of losses to premiums .	52.4	- 60.7	73.3	68.4

It will be seen that 15 per cent of the marine business was written by California companies, with a loss ratio of 52.4 per cent; 5.5 per cent by companies of other States, with a loss ratio of 60.7 per cent; and 79.5 per cent by foreign companies, with a loss ratio of 73.3 per cent.

As will be seen by the following figures, during the past twenty years the marine companies have received nearly \$31,000,000 in premiums, and have paid out losses of about \$17,500,000:

	Premiums Received.	Losses Paid.	Ratio of Losses to Premiums.
1884	\$1,433,138 20	\$468,410 86	32.7
1885	1,395,993 67	855,630 41	61.3
1886	1,515,279 79	676,325 30	43.8
1887	971,859 86	583,772 27	60.1
1888	1,752,696 58	955,239 49	54.5
1889	1,602,434 12	926,811 88	57.8
1890	1,526,453 95	1,109,431 64	72.7
1891	1,927,088 44	736,735 18	38.2
1892	1,638,876 63	1,059,120 83	64.6
1893	1,354,439 16	808,792 67	59.7
1894	1,113,840 90	418,106 22	37.5
1895	1,249,317 11	887,761 60	71.1
1896	1,418,739 79	819,221 66	57.7
1897	1,689,658 74	1,375,911 66	81.4
1898	1,789,140 56	765,624 90	42.8
1899	1,557,487 19	818,261 22	52.5
1900	1,938,123 83	1,134,047 78	58.5
1901	1,802,525 31	978,308 20	54.3
1902	1,692,599 26	1,074,070 22	63.5
1903	1,511,365 30	1,034,522 92	68.4
Totals	\$30,881,058 39	\$17,486,106 91	55.4

During the year two new marine companies were admitted to the State, namely, World Marine of London, and Nord Deutsche of Hamburg; and one discontinued business, namely, Bavarian Lloyd of Munich.

LIFE INSURANCE—LEVEL-PREMIUM COMPANIES.

The general prosperity of the State is in a measure reflected in the splendid amount of business done by life insurance companies. The amount written during the year was \$53,350,818, represented by 30,676 policies, while the amount written for the preceding year was \$41,946,481, represented by 21,246 policies; an increase of \$11,404,337, represented by 9,430 policies.

The premiums received during the year were \$8,866,405.31, while those for the preceding year were \$7,480,488.89; an increase of \$1,385,916.42.

Some idea of the increase in the life insurance business may be obtained when it is noted that the premiums received by the companies in the year 1903 were more than the premiums received for the five years from 1883 to 1887 inclusive.

The amount of insurance in force at the close of the year was \$232,048,054, represented by 104,514 policies, while the amount in force at the close of the preceding year was \$200,412,278, represented by 84,317 policies; an increase of \$31,635,776, represented by 20,197 policies.

These figures have reference only to the ordinary life business. The industrial business, by means of which the poorer classes are enabled to enjoy the benefits of life insurance in a lesser degree, although not making so good a showing as for the previous year in the amount of

new business written, still appears to be thriving. While the amount written in 1903 was less than that of the previous year, the amount in force at the close of 1903 was greater than the amount in force at the close of 1902. In 1903 the amount written was \$8,660,765, represented by 43,458 policies, while the amount written in 1902 was \$10,202,571, represented by 50,880 policies; a decrease of \$1,541,806.

The amount in force at the close of the year 1903 was \$19,214,475, represented by 99,919 policies, and the amount in force at the close of 1902 was \$18,426,555, represented by 92,665 policies; an increase of \$787,920, represented by 7,254 policies.

The premiums received amounted to \$507,075, while those of the previous year amounted to \$794,018, a decrease of \$286,943; while the losses paid in 1903 amounted to \$148,061, as against \$117,748.30 for the preceding year, an increase of \$30,312.70.

During the year, four new life insurance companies were authorized to transact business in this State, namely, Security Mutual Life Insurance Company, of Binghamton, N. Y.; Hartford Life, of Hartford, Conn.; Columbian National Life, of Boston, Mass.; and the Life Association of America, of New York. The latter three, however, did no business in this State during the year.

The life insurance business for the year past is summarized as follows:

ORDINARY LIFE BUSINESS.

Number of policies in force.....	104,514
Amount of insurance in force.....	\$232,048,054 00
Premiums received	8,866,405 31
Losses paid	2,881,932 78

INDUSTRIAL BUSINESS.

Number of policies in force.....	99,819
Amount of insurance in force.....	\$19,214,475 00
Premiums received.....	507,075 00
Losses paid.....	148,061 00

The following figures show the premiums received in California during the past twenty years by life insurance companies to have been nearly \$83,000,000, while the amount paid out by them for losses and endowments is nearly \$38,500,000:

	Premiums Received.	Losses and Endowments Paid.
1884	\$1,548,671 16	\$1,426,340 26
1885	1,590,344 82	1,114,844 57
1886	1,802,916 68	1,116,729 44
1887	2,073,203 65	1,051,055 11
1888	2,839,141 80	1,205,106 91
1889	3,253,759 62	1,545,497 51
1890	3,507,207 07	1,485,143 27
1891	3,818,753 65	1,626,832 60
1892	4,096,824 84	1,594,898 56
1893	4,255,153 76	2,093,825 96
1894	4,086,307 40	1,943,243 18
1895	4,077,486 45	1,973,822 49
1896	4,004,510 06	2,106,786 19
1897	4,252,455 64	2,068,975 06
1898	4,491,699 78	2,471,974 78
1899	4,925,429 09	2,473,543 38
1900	5,683,412 06	2,430,650 33
1901	6,242,443 41	2,975,847 61
1902	7,480,488 89	2,887,479 63
1903	8,866,405 31	2,881,932 78
Totals	\$82,896,615 14	\$38,474,529 62

LIFE INSURANCE—ASSESSMENT COMPANIES.

The report indicates that three assessment companies are authorized to do business in this State, namely, the Bankers Life Association of Des Moines, and the Fidelity Mutual Aid Association and the Decimal Mutual Life Insurance Company, both of California. The latter has, however, since the filing of the last report, practically been eliminated. After a careful examination of the books of the Decimal Mutual Life Insurance Company and the Los Angeles Mutual Life and Accident Association, to which it claimed to be the successor, I found that neither of the companies had ever properly qualified as an assessment company under the laws of California, in that there were never two hundred bona fide members who had contributed the \$5,000 required by the Act under which they were organized. Furthermore, the company had practically ceased doing business. In accordance with the law, I notified Attorney-General U. S. Webb of all the facts in the case, and he has taken the necessary steps to dissolve the corporation and wind up its affairs.

The following figures indicate the business done in California by the assessment life and accident companies during the past ten years:

	No. of Companies.	Amount Written and Renewed.	Receipts on Same.	Losses Paid.
1894	29	\$31,271,375 00	\$508,266 34	\$561,273 93
1895	19	41,899,185 00	607,228 95	510,067 93
1896	23	35,827,305 00	699,654 03	518,945 63
1897	21	46,662,051 00	751,878 70	331,860 16
1898	16	25,603,482 00	613,969 23	407,237 55
1899	6	13,986,050 00	246,167 33	189,382 84
1900	6	9,464,000 00	127,416 54	54,313 12
1901	3	6,813,000 00	74,127 03	31,924 67
1902	3	8,077,000 00	71,119 75	33,394 80
1903	3	11,095,500 00	96,568 58	41,797 45
Totals		\$228,698,948 00	\$3,796,396 48	\$2,680,197 45

HEALTH AND ACCIDENT INSURANCE.

One new company transacting this character of business was authorized to do business in this State during the year, namely, the United States Health and Accident Insurance Company, of Saginaw, Mich.; and one company discontinued business during the year, namely, the Frankfort American Insurance Company of New York.

The amount written during the year was \$102,054,934, while the amount written for the preceding year was \$98,861,574; an increase of \$3,193,360.

The premiums received for 1903 were \$431,186.61, while those for 1902 were \$408,840.65; an increase of \$22,345.96.

The losses paid during the year 1903 were \$170,991.42, while those for 1902 were \$133,992.48; an increase of \$36,998.94.

These figures do not include the returns made by the Fidelity Mutual Aid Association, the only assessment health and accident insurance company doing business in the State. Their figures show the amount written during the year to have been \$2,747,000, the premiums received \$20,050.12, and the losses paid \$7,797.45.

FIDELITY AND SURETY INSURANCE.

One new company was authorized to transact this character of business in this State during the year, namely, the Title Guaranty and Trust Company of Scranton, Penn.

The amount written during the year was \$83,994,816, while the amount written in 1902 was \$75,702,606; an increase of \$8,292,210.

The premiums received for 1903 were \$296,203.87, while those for 1902 were \$242,193.96; an increase of \$54,009.91.

The losses paid in 1903 amounted to \$31,388.86, while those of 1902 were \$59,171.50; a decrease of \$27,782.64.

EMPLOYERS' LIABILITY INSURANCE.

The premiums received during the year 1903 were \$392,194.62, while those for 1902 were \$297,169.78; an increase of \$95,024.84.

The losses paid in 1903 amounted to \$135,558.03, while the losses paid in 1902 were \$102,778.66; an increase of \$32,779.37.

PLATE-GLASS INSURANCE.

The premiums received during the year 1903 amounted to \$40,709.57, while those of 1902 were \$35,594.42; an increase of \$5,115.15.

The losses paid during the year 1903 amounted to \$13,199.14, while those of the preceding year were \$12,654.64; an increase of \$544.50.

TITLE INSURANCE.

One new company, namely, the Title Guarantee and Trust Company of Los Angeles, was authorized to transact this character of business during the year.

The amount written during the year was \$19,698,158, while the amount written the preceding year was \$17,196,493; an increase of \$2,501,665.

The premiums received during the year were \$126,574.78, while those of the preceding year amounted to \$95,729.30; an increase of \$30,845.48.

The losses paid during the year amounted to \$1,901.69, while those of the preceding year amounted to \$3,938.74; a decrease of \$2,037.05.

BURGLARY INSURANCE.

The amount written in 1903 was \$1,964,941, while the amount written the preceding year was \$1,176,656; an increase of \$788,285.

The premiums received during the year amounted to \$14,718.96, while those of the preceding year amounted to \$9,888.98; an increase of \$4,829.98.

The losses paid during the year amounted to \$2,202.05, while those of the preceding year amounted to \$927.13; an increase of \$1,274.92.

STEAM-BOILER INSURANCE.

The amount written during the year was \$4,157,126, while the amount written during the preceding year was \$4,284,917; a decrease of \$127,791.

The premiums received during the year amounted to \$32,158.33, while those for the preceding year amounted to \$29,935.29; an increase of \$2,223.04.

The losses paid during the year amounted to \$1,687.49, while those of the preceding year amounted to \$188.40; an increase of \$1,499.09.

CREDIT INDEMNITY INSURANCE.

The amount of insurance of this character written during the year 1903 amounted to \$840,000, while the amount written during the preceding year amounted to \$876,300; a decrease of \$36,300.

The premiums received during the year amounted to \$58,480, while those received during the preceding year amounted to \$55,790.01; an increase of \$2,689.99.

The losses paid during the year amounted to \$25,661.15, while the losses paid during the preceding year amounted to \$21,001.13; an increase of \$4,660.02.

CHANGES DURING THE YEAR.

During the year 1903 the following named companies were admitted to transact business in this State:

Western Underwriters' Association, Inc.	Chicago, Ill.
World Marine	London, Eng.
Security Mutual Life.....	Binghamton, N. Y.
Spring Garden.....	Philadelphia, Pa.
Hartford Life.....	Hartford, Conn.
Concordia Fire.....	Milwaukee, Wis.
Title Guaranty and Trust.....	Scranton, Pa.
Upper Rhine.....	Mannheim, Ger.
United States Health and Accident.....	Saginaw, Mich.
Columbian National Life.....	Boston, Mass.
Nord Deutsche.....	Hamburg, Ger.
Austrian Phoenix.....	Vienna, Aus.
Life Association of America.....	New York, N. Y.
Title Guarantee and Trust.....	Los Angeles, Cal.

And the following named companies discontinued business in this State:

Bavarian Lloyd.....	Munich, Ger.
Frankfort American.....	New York, N. Y.

DEATH OF MR. RHORER.

It is with deep regret that I chronicle the death of Mr. Milton M. Rhorer, who for twenty-nine years had served in this Department as Deputy Insurance Commissioner. Entering the office in 1876 he had continuously acted as deputy to each succeeding Commissioner up to the date of his death on April 24, 1904.

In the discharge of his duties he manifested a degree of zeal and fidelity to detail seldom equaled. Careful, conscientious, and faithful, he was a valuable public official, and occupied a distinct place in the insurance history of California. His death was certainly a great loss to this Department and has been constantly felt by me in the workings of the office.

It had been my intention to submit this report at an earlier date this year, but owing to the illness and subsequent death of Mr. Rhorer, who, during all of the years of his incumbency had compiled the tables, there has been unavoidable delay.

“UNAUTHORIZED INSURANCE.”

The subject of “unauthorized insurance” companies has received considerable attention from the insurance commissioners of this country for some time past, and a strong effort has been made to eliminate them entirely.

At the Insurance Commissioners' Convention held last year, the matter was taken up, and through a committee a bill was prepared, which, if enacted, would have deprived “wildeat” insurance companies of the use of the United States mails. This bill was introduced in Con-

gress, and, though a strong effort was made to secure its passage, it failed to become a law, largely on account of unlooked-for opposition. In accordance with the policy laid out by the Insurance Commissioners' Committee on Unauthorized Insurance, I communicated with our representatives in both houses of Congress and endeavored to secure their assistance in the passage of the measure. While the bill failed to become a law, it can not be said that the effort made has been entirely without results. The attention of the postal authorities has been directed to this evil, and, through the publicity given thereto, the public has been more thoroughly advised of it. It is believed that the evil has been in a measure minimized and it is hoped that it will be eventually stamped out.

In California there are two classes of this evil with which to contend. There are the "wildcat" or "underground" companies, which have no real existence, but which assume names similar to those of legitimate companies and solicit business largely through the mails, and by cheap rates induce people to part with their money for worthless "policies" of insurance. And there are those companies which, although authorized to transact business in their home States, neglect to comply with the laws of this State; they fail to file the necessary papers and pay the fees which would place them under the jurisdiction of this Department and entitle them to a certificate of authority, and, without any legal right so to do, attempt to secure business.

The law of California declares policies issued by a company not authorized to transact business in this State null and void, and makes it a misdemeanor to procure or agree to procure insurance for such companies. It is generally the plan of representatives of such companies to seek their business in small towns in remote sections of the State, and owing to the size of the State, and the limited funds at the disposal of this Department it has not been possible to follow up these violators of the law so vigorously as is desired. In so far as possible an effort has been made to punish them, and it is hoped ultimately to eliminate the evil entirely in California.

Since the filing of the last report, warrants were sworn out in Los Angeles against Alfred D. Hall of Pasadena on a charge of procuring insurance in the "Commonwealth Insurance Company of Chicago," and L. D. Post of Los Angeles on a charge of securing a policy in the "Citizens Insurance Company of Chicago," both of which were "wildcat" concerns. A similar charge was made against E. H. Walker for procuring insurance for a resident of this State in the "National Protective Society," which is not authorized to transact business in this State. All of these defendants were found guilty.

In San Francisco warrants were issued against C. M. Oakley and

Charles F. Blanden on a charge of procuring insurance in the "Mutual Reserve Life Insurance Company of New York," and another against the said Oakley for agreeing to procure insurance in the "General Accident Assurance Corporation." C. B. F. Lincoln and H. A. Marchand were arrested for procuring insurance in the "Pennsylvania Life and Accident Association."

A complaint was filed in Contra Costa County and warrant issued charging James N. Kirk with procuring insurance for a resident of the State in the "Old Wayne Life Insurance Company of Indianapolis"; and complaints were also filed and warrants issued in Guerneville against Joseph P. Betancue and T. F. Lewis on a charge of procuring insurance for a number of residents of Duncan Mills in the "Phoenix Indemnity Company of Colorado." These last mentioned companies are not authorized to do business in California

Having received information that a company, incorporated under the name of the "Mutual Benefit Coöperative Company," was operating upon the lines of an assessment insurance company, I instituted an investigation of the company's methods, and after submitting the results to the Attorney-General, a suit was brought by that official, in the name of the People of the State of California, upon the relation of myself, against said company. The complaint sets forth the facts and prays that the company be enjoined from carrying on the business it is engaged in and that it be dissolved. This matter is now pending in the courts.

Further efforts will be made to punish offenders, and it is hoped that ultimately no illegitimate insurance will be dispensed in California. It is only just to those companies which comply with the law and pay their taxes that they should be protected from competition with illegitimate companies which prey upon their business. It is of greater importance that the people who pay for their insurance shall secure it in companies from which they can secure indemnity in the event of loss.

BALTIMORE AND OTHER CONFLAGRATIONS.

Since the filing of the last report the fire insurance companies transacting business in this country have met with a series of heavy and unusual disasters through the great conflagrations which have taken place in Baltimore, Rochester, and Toronto. The first of these was the heaviest; nearly twenty-five hundred buildings were destroyed and the space burned over represents one hundred and forty acres. The loss is estimated as approximately \$50,000,000, with \$30,000,000 of insurance.

The important place that fire insurance companies fill in the business affairs of this country, and the general conservatism and business

sagacity with which these large institutions are being managed, were reflected in the promptness and facility with which these heavy losses were paid. In the great conflagrations which have taken place in the past, policy-holders experienced much difficulty in being reimbursed for their losses, but with the exception of some Maryland companies, which were compelled to reinsure their business as a result of the losses sustained, nearly all of the companies of this country paid their losses out of their surpluses, and a number of the foreign companies paid their losses from the home offices of the companies. The wisdom of the prevailing policy of maintaining large reserves and surpluses has been thoroughly vindicated by the experience in these recent disasters.

The only Maryland company transacting business in California was the Firemen's of Baltimore, which reinsured its business in the unburned portions of Baltimore in the Firemen's Fund Insurance Company of California, and the rest of its insurance business with the Providence-Washington of Rhode Island.

The two California companies, the Fireman's Fund and the Home Fire and Marine, sustained heavy losses, the former about \$350,000, and the latter about \$125,000, but both companies paid these losses promptly out of their surpluses.

As a more or less indirect result of these conflagrations, the Thuringia Insurance Company of Germany withdrew from the United States, and reinsured its business with the Fireman's Fund Insurance Company of this State. When it is noted that the Thuringia's premiums during the year were more than \$1,000,000, some idea of the magnitude of the deal may be inferred.

FINANCIAL STATEMENT.

The following statement shows the amount received by the State during the year for taxes and fees, and the expenditures by this office, the balance to the credit of the State being \$61,996.25:

Received during the year for taxes and fees.....	\$68,761 38
<i>Expenditures.</i>	
Office salaries.....	\$4,800 00
Office rent.....	900 00
Messenger	600 00
Telephone	131 90
Stationery	30 70
Postage	100 00
Expressage	6 85
Office furniture.....	35 00
Incidentals	160 68
	<hr/>
	6,765 13
Balance	\$61,996 25

Respectfully submitted.

E. MYRON WOLF,
Insurance Commissioner.

TABLE No. 1.

Showing the Business of California Fire and Marine Insurance Companies during the year 1903—California Business.

FIRE.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.	Ratio of Losses to Premiums
Fireman's Fund	San Francisco	\$26,840,487 00	\$470,543 15	\$217,757 99	46.3
Home Fire and Marine	San Francisco	11,176,400 00	199,137 89	97,838 94	49.2
Totals		\$38,016,887 00	\$669,681 04	\$315,596 93	47.1

MARINE.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.	Ratio of Losses to Premiums
Fireman's Fund	San Francisco	\$26,297,986 00	\$221,128 57	\$101,253 10	45.8
Home Fire and Marine	San Francisco	5,243,284 00	50,452 30	40,975 44	81.2
Totals		\$31,541,270 00	\$271,580 87	\$142,228 54	52.4

TABLE No. 2.

Showing Amount and Description of Risks in Force on December 31, 1903, of California Companies—California Business.

Name.	Location.	Fire.		Marine.	
		Risks.	Premiums.	Risks.	Premiums.
Fireman's Fund	San Francisco	\$43,911,144 00	\$681,018 51	\$2,675,346 00	\$120,601 89
Home Fire and Marine	San Francisco	19,092,775 00	301,783 96	638,029 00	31,515 40
Totals		\$53,003,919 00	\$982,802 47	\$3,313,375 00	\$152,117 29

TABLE No. 3.
Showing the Business of California County Mutual Fire Insurance Companies for the year 1903.

Name.	Location.	Amount Written.	Receipts on Same.	Losses Paid.
Humboldt County Fire	Ferndale.....	\$132,915 00	\$673 97	\$200 00
Los Angeles County Mutual Fire	Los Angeles	497,065 00	2,454 64	60 00
Orange County Farmers' Mutual Fire	Santa Ana	360,017 00	1,074 38	20 00
San Bernardino County Mutual Fire	Ontario	84,887 00	198 51	1,307 30
Sacramento County Patrons' and Farmers' Mutual Fire	Sacramento.....	34,405 00	87 75	610 00
Santa Barbara County Farmers' Mutual Fire	Santa Barbara	35,455 00	290 44	None
Santa Clara County Fire	San José	87,068 00	176 90	None
Scandinavian Mutual Protective Fire	Kingsburg	154,525 00	701 30	129 00
Sonoma County Farmers' Mutual Fire	Santa Rosa	239,421 00	563 16	None
Ventura County Mutual Fire	San Buenaventura	175,869 00	2,081 61	1,767 05
Totals .....	.....	\$1,801,627 00	\$8,302 66	\$4,093 35

TABLE No. 4.

Showing the Fire Business of Insurance Companies of other States for the year 1903—California Business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.	Ratio of Losses to Premiums.
Etna	Hartford	\$9,851,243 00	\$156,262 28	\$87,641 78	56.1
Agricultural	Watertown, N. Y.	2,263,805 00	38,234 05	19,964 63	52.2
American	Newark	2,568,628 00	38,699 99	20,925 67	54.1
American	Boston	2,609,385 00	40,601 51	22,833 85	56.2
American Central	St. Louis	2,844,124 00	45,927 82	22,319 70	48.6
American Fire	Philadelphia	4,374,403 00	81,242 83	37,932 77	46.6
Assurance Co. of America	New York	296,788 00	4,731 27	1,966 36	41.6
Caledonian American	New York	1,017,677 00	18,043 81	7,270 00	40.3
Citizens	St. Louis	2,712,324 00	42,599 17	29,588 84	69.5
Commercial Union Fire	New York	401,653 00	5,686 46	8,112 09	142.7
Concordia Fire	Milwaukee	427,357 00	7,665 24	1,558 98	20.3
Continental	Hartford	6,652,855 00	111,597 80	51,721 53	46.4
Delaware	New York	10,822,728 00	142,199 21	86,741 70	60.0
Dutchess	Philadelphia	1,585,147 00	25,657 47	11,121 35	43.3
Equitable Fire and Marine	Poughkeepsie	2,930,993 00	49,204 30	28,827 61	58.5
Fire Association	Providence, R. I.	1,600,523 00	30,261 41	22,127 10	73.1
Firemen's	Philadelphia	4,731,725 00	76,932 95	35,390 90	46.0
Franklin Fire	Baltimore	2,887,788 00	41,885 41	16,111 22	38.5
German	Philadelphia	4,130,136 00	71,493 77	56,981 76	79.7
German Alliance	Freeport, Ill.	9,293,398 00	136,928 91	80,840 32	59.0
German American	New York	2,444,742 00	38,741 11	19,804 06	51.1
German Fire	New York	9,917,782 00	152,974 20	67,298 00	43.9
Germania Fire	Peoria	786,923 00	13,826 37	11,102 04	80.3
Glens Falls	New York	6,815,825 00	90,136 85	15,268 91	16.9
Globe and Rutgers Fire	Glens Falls, N. Y.	4,504,614 00	69,138 28	41,695 59	64.6
Greenwich	New York	1,343,979 00	23,482 57	6,367 92	27.1
Hanover Fire	New York	1,177,659 00	21,387 66	15,453 70	72.2
Hartford Fire	New York	4,405,769 00	72,669 07	37,165 76	51.1
Home	Hartford	21,687,497 00	337,796 57	142,086 45	42.1
Indemnity Fire	New York	15,316,578 00	271,543 15	133,036 85	48.9
Insurance Co. of North America	New York	998,967 00	14,729 34	8,187 98	55.6
Kings County Fire	Philadelphia	8,121,612 00	130,311 81	82,124 55	63.0
Mercantile Fire and Marine	New York	333,771 00	3,840 89	4,388 21	114.2
Michigan Fire and Marine	Boston	1,834,986 00	27,624 62	9,455 27	32.1
Milwaukee Mechanics	Detroit	1,414,096 00	26,848 49	18,310 93	69.1
	Milwaukee	8,796,510 00	121,969 76	50,878 70	41.7

National Fire	Hartford	8,163,755 00	152,293 16	89,861 97	59.0
National Standard	New York	87,283 00	777 05	216 35	27.9
National Union Fire	Pittsburg	2,487,793 00	34,037 53	5,501 00	16.1
New Hampshire Fire	Manchester	187,723 00	29,541 51	10,815 28	36.6
New York Fire	New York	947,439 00	14,973 96	8,130 87	54.4
Niagara Fire	New York	6,266,010 00	96,806 51	49,495 53	51.1
North German Fire	New York	1,376,413 00	19,059 12	6,613 33	34.7
Northwestern National	Milwaukee	6,313,751 00	89,225 85	49,320 00	55.3
Orient	Hartford	2,020,299 00	28,351 60	10,817 48	38.2
Pelican	New York	902,642 00	15,745 10	11,930 30	75.8
Pennsylvania Fire	Philadelphia	8,845,978 00	153,501 47	85,278 61	55.5
Phoenix	Brooklyn	3,300,090 00	60,408 12	46,616 22	77.2
Phoenix	Hartford	5,776,380 00	93,057 48	47,580 77	51.1
Providence-Washington	Providence, R. I.	1,886,672 00	35,387 45	23,243 78	65.7
Queen	New York	5,584,551 00	94,945 62	52,256 56	55.0
Rochester German	Rochester, N. Y.	1,747,997 00	27,461 73	12,409 00	45.2
Springfield Fire and Marine	Springfield, Mass.	4,903,612 00	91,397 04	56,209 18	61.5
Spring Garden	Philadelphia	586,782 00	9,530 89	1,679 47	17.6
St. Paul Fire and Marine	St. Paul	3,128,172 00	51,699 09	25,521 14	49.4
Teutonia	New Orleans	1,551,285 00	26,254 08	19,281 08	73.4
Traders	Chicago	8,978,641 00	116,592 39	58,964 89	50.6
Union	Philadelphia	1,160,608 00	17,908 50	13,826 22	77.0
United Firemen's	Philadelphia	1,468,202 00	21,248 02	11,251 51	52.6
Victoria Fire	New York	295,521 00	4,331 50	2,932 18	67.7
Westchester Fire	New York	4,452,127 00	70,143 69	45,487 41	64.8
Western Underwriters	Chicago	2,424,489 00	32,777 33	6,591 94	20.1
Williamsburg City Fire	Brooklyn	4,122,610 00	66,541 88	55,776 04	83.8
Totals		\$254,571,365 00	\$4,036,864 07	\$2,123,241 19	52.2

TABLE No. 5.

Showing the Fire Risks in Force in California on December 31, 1903--Companies of Other States.

Name.	Location.	Risks.	Premiums.
Etna	Hartford	\$16,722,812 00	\$247,407 02
Agricultural	Watertown, N. Y.	2,765,992 00	45,762 28
American	Newark	5,122,443 00	78,577 94
American	Boston	3,846,427 00	48,489 68
American Central	St. Louis	3,609,243 00	60,407 43
American Fire	Philadelphia	5,177,824 00	95,243 85
Assurance Co. of America	New York	296,788 00	4,229 83
Caledonian American	New York	1,747,972 00	29,061 01
Citizens	St. Louis	3,519,489 00	56,555 35
Commercial Union Fire	New York	421,240 00	5,112 40
Concordia Fire	Milwaukee	400,195 00	7,397 90
Connecticut Fire	Hartford	9,979,282 00	149,541 05
Continental	New York	20,806,432 00	286,687 15
Delaware	Philadelphia	1,792,420 00	29,638 24
Dutchess	Poughkeepsie	3,741,977 00	55,786 48
Equitable Fire and Marine	Providence	2,560,836 00	48,418 11
Fire Association	Philadelphia	7,414,097 00	111,342 40
Firemen's	Baltimore	3,028,468 00	41,737 51
Franklin Fire	Philadelphia	5,506,623 90	88,537 07
German	Freeport, Ill.	9,781,997 00	137,739 75
German Alliance	New York	3,728,838 00	52,203 73
German-American	New York	16,424,170 00	229,938 38
German Fire	Peoria	1,093,745 00	14,245 37
Germania Fire	New York	13,177,763 00	154,361 19
Glens Falls	Glens Falls, N. Y.	4,955,075 00	75,052 10
Globe and Rutgers Fire	New York	1,478,464 00	23,676 14
Greenwich	New York	1,522,828 00	23,724 54
Hanover Fire	New York	7,137,346 00	99,011 51
Hartford Fire	Hartford	34,212,558 00	493,177 96
Home	New York	24,506,524 00	434,469 04
Indemnity Fire	New York	1,176,771 00	16,402 21
Insurance Co. of North America	Philadelphia	13,595,126 00	200,534 25
Kings County Fire	New York	646,035 00	6,719 27
Mercantile Fire and Marine	Boston	3,002,307 00	46,440 32
Michigan Fire and Marine	Detroit	1,525,107 00	30,990 52
Milwaukee Mechanics	Milwaukee	17,588,636 00	203,517 35
National Fire	Hartford	8,163,755 00	152,293 16
National Standard	New York	87,283 00	695 08
National Union Fire	Pittsburg	2,310,593 00	32,295 15
New Hampshire Fire	Manchester	2,909,773 00	43,646 59
New York Fire	New York	1,153,768 00	18,444 46
Niagara Fire	New York	7,782,384 00	120,626 95
North German Fire	New York	1,549,810 00	21,613 49
Northwestern National	Milwaukee	17,165,653 00	191,097 06
Orient	Hartford	1,905,922 00	26,560 13
Pelican	New York	1,081,092 00	18,204 25
Pennsylvania Fire	Philadelphia	15,138,174 00	244,925 90
Phenix	Brooklyn	4,992,017 00	77,489 00
Phoenix	Hartford	10,044,599 00	146,059 26
Providence-Washington	Providence	2,433,902 00	38,213 45
Queen	New York	7,663,926 00	116,020 67
Rochester German	Rochester, N. Y.	2,355,443 00	35,931 25
Springfield Fire and Marine	Springfield, Mass.	4,903,612 00	91,397 00
Spring Garden	Philadelphia	566,201 00	9,226 84
St. Paul Fire and Marine	St. Paul	5,022,877 00	76,820 24
Teutonia	New Orleans	2,201,830 00	32,198 55
Traders	Chicago	11,692,610 00	140,230 72
Union	Philadelphia	1,585,605 00	20,565 77
United Firemen's	Philadelphia	1,532,977 00	21,886 58
Victoria Fire	New York	339,842 00	4,974 65
Westchester Fire	New York	6,229,186 00	87,158 05
Western Underwriters	Chicago	2,383,655 00	31,272 21
Williamsburg City Fire	Brooklyn	4,534,871 00	73,196 06
Totals		\$381,825,210 00	\$5,605,178 94

TABLE No. 6.
Showing the Fire Business of Insurance Companies for the year 1903—California Business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.	Ratio of Losses to Premiums.
Aachen and Munich Fire	Aix-la-Chapelle, Germany	\$8,594,380 00	\$141,637 83	\$61,163 69	48.8
Alliance	London	6,278,984 00	93,777 73	63,182 38	67.4
Atlas	London	6,282,756 00	97,464 92	63,013 42	65.6
Austrian Phoenix	Vienna	453,865 00	7,026 43	1,000 00	14.2
British America	Toronto	4,007,719 00	74,315 34	36,732 74	49.4
Caledonian	Edinburgh	4,906,644 00	79,412 71	40,394 00	50.9
Commercial Union	London	9,618,121 00	153,131 43	84,728 32	55.3
Hamburg-Bremen Fire	Hamburg	7,368,245 00	111,932 11	47,840 65	42.7
Helvetia Swiss Fire	St. Gall	Did no business.			
Law Union and Crown	London	2,705,220 00	40,467 07	23,021 82	56.9
Liverpool and London and Globe	Liverpool	17,185,901 00	232,494 17	119,521 46	51.4
London	London	10,652,240 00	162,206 54	89,808 62	55.4
London and Lancashire Fire	Liverpool	13,505,826 00	195,289 96	97,985 42	50.2
Manchester	Manchester	5,799,895 00	90,819 67	54,256 00	59.6
New Zealand	Auckland	4,133,373 00	68,835 88	58,097 63	84.4
Netherlands Fire and Life	The Hague	2,418,816 00	46,112 61	28,940 14	62.8
North British and Mercantile	London	7,085,313 00	109,424 84	52,059 21	47.5
Northern	London	6,160,163 00	97,767 97	71,705 69	73.3
North German Fire	Hamburg	6,168,916 00	87,363 12	41,007 87	46.9
Norwich Union Fire	Norwich, England	6,133,756 00	109,543 92	42,807 93	39.1
Palatine	London	5,824,641 00	92,491 39	38,617 96	41.8
Phoenix	London	7,968,010 00	132,814 35	98,930 26	74.5
Prussian National	Stettin	4,327,543 00	67,397 91	25,524 13	37.9
Rhine and Moselle Fire	Strasbourg	6,281,147 00	85,246 42	23,133 39	27.1
Royal	Liverpool	13,207,619 00	220,142 91	120,091 09	54.5
Royal Exchange	London	9,334,354 00	134,692 12	68,005 77	54.0
Scottish Union and National	Edinburgh	4,792,373 00	74,067 74	32,283 08	43.5
State Fire	Liverpool	2,219,703 00	33,510 04	20,070 32	59.8
Sun	London	7,464,690 00	126,636 96	76,779 43	60.3
Svea Fire and Life	Gothenburg, Sweden	5,114,285 00	94,464 52	64,403 88	68.2
Thuringia	Erfurt	11,834,311 00	183,969 38	106,029 27	57.7
Transatlantic Fire	Hamburg	9,016,955 00	130,830 04	56,856 90	43.5
Union	London	5,353,402 00	81,470 12	45,532 31	55.9
Western	Toronto	7,151,045 00	125,051 64	42,472 70	33.9
Totals		\$230,350,251 00	\$3,581,809 79	\$1,903,947 48	53.2

TABLE No. 7.

*Showing Fire Risks in Force of Companies of Foreign Countries on December 31, 1903—
California Business.*

Name.	Location.	Risks.	Premiums.
Aachen and Munich Fire	Aix-la-Chapelle, Ger.....	\$13,923,262 00	\$192,980 98
Alliance	London.....	9,085,689 00	117,403 72
Atlas	London.....	12,191,096 00	161,359 40
Austrian Phoenix	Vienna.....	452,865 00	7,026 43
British America	Toronto.....	5,939,207 00	102,827 62
Caledonian	Edinburgh.....	8,361,912 00	114,022 12
Commercial Union	London.....	14,196,346 00	195,548 79
Hamburg-Bremen Fire	Hamburg.....	10,327,570 00	139,742 50
Helvetia Swiss Fire	St. Gall.....	1,230,904 00	13,574 14
Law Union and Crown	London.....	3,115,952 00	46,501 59
Liverpool and London and Globe	Liverpool.....	24,418,395 00	357,228 72
London.....	London.....	12,953,072 00	196,886 69
London and Lancashire Fire	Liverpool.....	13,955,831 00	200,193 97
Manchester	Manchester.....	9,740,967 00	129,301 82
New Zealand	Auckland.....	7,745,223 00	109,020 18
Netherlands Fire and Life	The Hague.....	3,057,688 00	41,645 43
North British and Mercantile	London.....	10,336,971 00	148,547 28
Northern	London.....	10,004,336 00	138,667 12
North German Fire	Hamburg.....	10,608,891 00	121,327 47
Norwich Union Fire	Norwich, Eng.....	9,387,482 00	143,991 69
Palatine	London.....	8,620,469 00	123,013 55
Phoenix	London.....	12,486,870 00	201,698 45
Prussian National	Stettin.....	8,514,349 00	108,916 07
Rhine and Moselle Fire	Strasburg.....	7,009,812 00	86,389 85
Royal	Liverpool.....	18,830,479 00	276,119 24
Royal Exchange	London.....	15,802,945 00	202,156 30
Scottish Union and National	Edinburgh.....	11,998,978 00	159,988 25
State Fire	Liverpool.....	2,125,917 00	31,947 42
Sun	London.....	11,713,569 00	138,271 73
Svea Fire and Life	Gothenburg.....	6,298,919 00	115,998 00
Thuringia	Erfurt.....	21,020,603 00	313,206 94
Transatlantic Fire	Hamburg.....	14,477,663 00	182,047 95
Union	London.....	6,156,751 00	93,605 85
Western	Toronto.....	10,202,123 00	166,551 00
Totals .....	.....	\$346,293,106 00	\$4,876,814 26

TABLE No. 8.

Showing the Business of Marine Insurance Companies, other than California Companies, for the year 1903—California Business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.	Ratio of Losses to Premiums.
Alliance	Berlin	\$4,601,110 00	\$52,410 10	\$30,433 15	58.1
Alliance Marine	London	3,258,111 00	21,240 78	15,672 90	73.8
American and Foreign Marine	New York	1,083,088 00	2,225 94	1,500 50	67.4
Australian Alliance	Melbourne	2,100,560 00	35,853 93	14,755 70	41.2
Baloise Marine	Basle	11,314,286 00	66,753 21	32,408 91	48.5
Bavarian Lloyd	Munich	3,498,305 00	12,232 72	6,459 26	52.8
Boston	Boston	277,123 00	8,883 15	2,593 15	29.2
British America	Toronto	548,495 00	23,348 76	22,007 57	94.3
British and Foreign Marine	Liverpool	22,517,322 00	103,791 96	117,984 30	113.7
Canton	Hong Kong	9,521,254 00	77,669 84	61,301 04	78.9
China Traders	Hong Kong	731,478 00	2,823 00	None	
Commercial Union	London	24,017,575 00	45,791 69	23,228 07	50.7
Delaware	Philadelphia	823,706 00	6,607 37	3,402 26	51.5
Federal	Jersey City	360,210 00	6,853 60	None	
Fonciere	Paris	5,297,446 00	39,333 60	20,492 29	52.1
Helvetia General	St. Gall	11,314,286 00	66,753 21	32,408 92	48.5
Imperial Marine	Tokio	453,174 00	6,051 72	2,354 65	38.9
Indemnity Mutual Marine	London	1,573,056 00	16,728 22	18,264 41	109.2
Insurance Company of North America	Philadelphia	5,874,445 00	69,665 10	47,550 36	68.3
London	London	1,797,984 00	13,058 90	16,096 00	123.3
London and Provincial Marine and General	London	977,592 00	14,611 99	12,119 84	83.8
Mannheim	Mannheim	2,129,814 00	7,214 73	4,82 18	6.7
Man On	Hong Kong	564,938 00	1,630 93	121 85	7.5
Marine	London	1,931,500 00	27,612 03	50,325 85	182.3
Maritime	Liverpool	2,386,239 00	44,367 63	24,621 81	55.5
New Zealand	Auckland	1,650,548 00	22,003 89	8,712 03	39.6
North Deutsche	Hamburg	1,423,838 00	5,273 41	None	
North China	Shanghai	7,892,070 00	20,432 35	15,946 64	78.0
Ocean Marine	London	8,254,086 00	14,877 99	15,966 59	107.3
Po On	Hong Kong	204,175 00	522 00	None	
Providence-Washington	Providence, R. I.	1,563,944 00	23,277 90	22,787 88	97.7
Prussian National	Stettin	748,929 00	2,881 96	78 25	2.8
Reliance Marine	Liverpool	689,650 00	9,685 41	17,350 45	180.2
Royal Exchange	London	2,685,550 00	1,146 88	None	
Sea	Liverpool	733,078 00	10,407 59	13,699 31	131.6
Standard Marine	Liverpool	8,735,388 00	48,216 94	35,122 60	74.7

TABLE No. 8—CONTINUED.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.	Ratio of Losses to Premiums.
St. Paul Fire and Marine	St. Paul.	\$1,544,745 00	\$18,202 84	\$4,514 89	24.8
Switzerland General	Zurich	7,906,639 00	65,623 93	32,408 92	49.4
Thames and Mersey	Liverpool	3,442,530 00	77,127 84	83,542 66	108.3
Union Marine	Liverpool	1,041,774 00	16,081 03	19,614 79	121.9
Univervo Marine	Milan	655,380 00	10,048 35	6,607 74	65.7
Upper Rhine	Mannheim	990,046 00	18,752 83	69 48	.04
Western	Toronto.	1,961,582 00	46,291 45	18,521 95	40.0
Wilhelma.	Magdeburg	1,567,924 00	13,947 95	9,828 35	70.5
World Marine.	London	1,000,407 00	3,348 57	None	---
Yangtse	Shanghai	5,381,214 00	38,279 34	30,936 98	80.8
Totals		\$179,026,634 00	\$1,239,784 43	\$892,294 38	71.9

TABLE No. 9.

*Showing Marine Risks in Force in other than California Companies on December 31, 1903—
California Business.*

Name.	Location.	Risks.	Premiums.
Alliance	Berlin	\$704,605 00	\$18,730 40
Alliance Marine	London	610,293 00	8,726 53
American and Foreign Marine	New York	3,734 00	46 44
Australian Alliance	Melbourne	560,659 00	20,269 80
Baloise Marine	Basle	718,830 00	23,619 91
Bavarian Lloyd	Munich	None	—
Boston	Boston	83,826 00	6,801 91
British America	Toronto	348,882 00	20,895 99
British and Foreign Marine	Liverpool	1,826,515 00	25,320 40
Canton	Hong Kong	1,059,900 00	39,689 21
China Traders	Hong Kong	26 068 00	183 82
Commercial Union	London	1,050,330 00	10,717 98
Delaware	Philadelphia	74,058 00	2,373 71
Federal	Jersey City	335,310 00	6,706 75
Fonciere	Paris	484,447 00	25,685 50
Helvetia General	St. Gall	718,830 00	23,619 91
Imperial Marine	Tokio	75,675 00	5,176 74
Indemnity Mutual Marine	London	1,231,329 00	9,728 37
Ins. Co. of North America	Philadelphia	853,575 00	36,066 57
London	London	465,755 00	6,219 82
London and Provincial Marine and General	London	730,790 00	10,743 58
Mannheim	Mannheim	93,136 00	3,264 06
Man On	Hong Kong	73,330 00	200 84
Marine	London	1,392,066 00	19,438 95
Maritime	Liverpool	866,787 00	28,887 21
New Zealand	Auckland	330,442 00	8,287 27
Nord Deutsche	Hamburg	98,789 00	662 06
North China	Shanghai	513,829 00	2,499 40
Ocean Marine	London	498,880 00	6,445 43
Po On	Hong Kong	204,175 00	522 00
Providence-Washington	Providence	313,516 00	15,177 50
Prussian National	Stettin	540 00	4 05
Reliance Marine	Liverpool	471,515 00	6,599 03
Royal Exchange	London	—	—
Sea	Liverpool	550,886 00	7,742 45
Standard Marine	Liverpool	619,396 00	8,900 48
St. Paul Fire and Marine	St. Paul	154,003 00	7,368 19
Switzerland General	Zurich	718,830 00	23,619 91
Thames and Mersey	Liverpool	1,320,329 00	53,161 69
Union Marine	Liverpool	643,340 00	11,657 11
Universo Marine	Milan	279,091 00	8,008 95
Upper Rhine	Mannheim	512,417 00	14,799 87
Western	Toronto	514,422 00	26,675 04
Wilhelma	Magdeburg	126,057 00	3,014 55
World Marine	London	150,516 00	1,359 51
Yangtse	Shanghai	700,812 00	14,851 57
Totals		\$23,110,515 00	\$574,470 46

TABLE No. 10.

Showing New Policies Written During the Year, Policies Renewed, and Amount of Policies in Force on December 31, 1903, of Life Insurance Companies Doing Business in California—California Business.

Name.	Location.	New Policies Written.			Policies Renewed.			Policies in Force December 31, 1903.			Losses and Endowments Paid.
		No.	Amount.	Premium.	No.	Amount.	Premium.	No.	Amount.		
Etna Life	Hartford	969	\$1,871,000 00	\$72,563 98	1,277	\$2,911,700 00	\$113,753 20	2,482	\$5,015,810 00	\$85,663 95	
Connecticut Mutual Life	Hartford	102	20,200 00	7,841 05	1,961	4,401,209 00	160,145 44	2,422	5,005,434 00	187,394 14	
Conservative Life	Los Angeles	4,082	7,086,843 00	382,865 79	1,397	3,913,143 00	125,075 38	4,784	9,403,579 00	21,500 00	
Equitable Life	New York	3,728	8,445,435 00	339,014 39	8,076	22,105,954 00	949,411 17	12,995	33,060,326 00	246,482 38	
Fidelity Mutual Life	Philadelphia	352	819,550 00	26,301 13	1,426	3,267,766 00	100,243 85	1,778	4,087,316 00	34,608 97	
Germania Life	New York	332	562,000 00	28,570 27	1,302	3,109,000 00	126,968 01	1,844	4,289,011 00	68,578 89	
Hartford Life	Hartford	Did no business.									
Home Life	New York	292	686,500 00	26,209 08	1,363	2,885,402 00	107,005 11	1,762	3,635,211 00	37,879 20	
Life Association of America	New York	Did no business.									
Manhattan Life	New York	197	513,000 00	23,696 91	631	1,727,000 00	60,920 00	820	1,973,694 00	116,809 00	
Massachusetts Mutual Life	Springfield	194	411,250 00	14,903 83	645	1,309,100 00	46,467 85	839	1,720,350 00	27,500 00	
Metropolitan Life	New York	2,721	2,572,547 00	66,757 00	1,695	1,677,212 00	69,868 00	3,571	3,301,950 00	7,679 00	
Minnesota Mutual Life	St. Paul	31	78,602 00	2,611 07	166	464,659 00	14,232 57	197	543,261 00	2,000 00	
Mutual Life	New York	2,221	4,637,698 00	153,819 62	9,936	27,168,519 00	1,119,407 24	13,869	36,217,767 00	636,641 27	
Mutual Benefit Life	Newark	489	1,199,100 00	49,201 06	2,140	6,423,378 00	206,600 30	2,765	7,978,425 00	119,195 45	
National Life	Montpelier, Vt.	269	576,000 00	23,308 70	1,358	3,091,498 00	114,805 97	1,627	3,667,498 00	12,000 00	
New England Mutual Life	Boston	646	1,290,000 00	50,170 38	3,424	6,903,200 00	271,238 54	4,641	8,805,955 00	87,411 18	
New York Life	New York	4,031	7,534,348 00	341,469 92	11,229	29,352,292 00	1,230,921 66	16,451	38,898,753 00	454,218 79	
Northwestern Mutual Life	Milwaukee	1,257	2,573,550 00	106,202 87	5,834	13,591,339 00	415,542 54	7,044	16,242,427 00	198,201 00	
Northwestern National Life	Minneapolis	105	116,852 00	4,796 79	472	851,979 00	12,876 76	577	968,831 00	13,100 00	
Pacific Mutual Life	San Francisco	4,943	4,316,310 00	211,200 41	4,437	10,319,215 00	370,968 18	9,380	14,635,525 00	176,125 00	
Penn Mutual Life	Philadelphia	1,163	2,698,397 00	96,787 18	4,108	10,456,514 00	383,367 91	5,271	13,151,911 00	108,755 59	
Phoenix Mutual Life	Hartford	170	332,600 00	12,739 42	534	988,150 00	40,679 11	704	1,320,650 00	23,360 00	
Provident Life and Trust	Philadelphia	442	818,878 00	42,082 23	1,192	4,298,617 00	160,099 19	634	1,248,495 00	5,774 00	
Provident Savings Life	New York	66	222,000 00	12,009 96	646	1,892,040 00	62,150 19	728	2,125,370 00	27,000 00	
Prudential	Newark	641	1,264,790 00	65,438 18	327	733,170 00	56,731 63	1,221	2,579,995 00	4,042 00	
Security Mutual Life	Binghamton	32	48,427 00	2,756 22				43	82,477 00	1,300 00	
State Life	Indianapolis	152	866,000 00	20,917 63	106	561,500 00	24,956 23	159	851,500 00	None	
Travelers	Hartford	125	255,000 00	9,842 34	884	2,072,530 50	72,575 59	1,017	2,336,410 00	50,000 00	
Union Central Life	Cincinnati	209	618,736 00	18,025 90	849	2,058,430 00	92,542 15	1,058	2,677,166 00	2,478 28	
Union Mutual Life	Portland, Me.	495	684,706 00	31,014 56	2,300	3,605,410 00	129,949 55	2,977	4,538,831 00	71,144 33	
Washington Life	New York	220	438,800 00	20,039 89	634	1,242,326 00	47,804 23	854	1,681,126 00	29,090 66	
Totals		30,676	\$53,350,819 00	\$2,263,187 76	69,349	\$169,513,332 00	\$6,603,217 55	104,514	\$232,048,054 00	\$2,881,932 78	
Metropolitan Life (Indus.)	New York	43,458	\$8,680,765 00		77,081	\$14,955,494 00	\$384,451 00	99,919	\$19,214,475 00	\$148,061 00	
Columbian National	Boston	Did no business.									

TABLE No. 11.

Showing the Business of Accident Insurance Companies for the year 1903—California Business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
Ætna Life	Hartford	\$13,166,000 00	\$44,093 95	\$18,838 27
Continental Casualty	Hammond, Ind.	4,079,800 00	71,898 04	31,055 16
Employers' Liability	London	4,085,500 00	20,719 32	10,597 80
Fidelity and Casualty	New York	15,854,625 00	47,091 05	12,604 95
Frankfort Marine, Accident and Plate Glass	Frankfort, Ger.	1,519,000 00	4,161 15	2,776 45
London Guarantee and Accident	London	883,500 00	4,192 48	463 30
Maryland Casualty	Baltimore	1,716,000 00	4,220 73	630 71
New Amsterdam Casualty	New York	1,250,000 00	4,043 44	307 00
North American Accident	Chicago	497,432 00	4,668 01	914 05
Pacific Mutual Life	San Francisco	15,704,565 00	66,419 43	34,125 54
Preferred Accident	New York	19,552,000 00	52,087 95	7,550 12
Royal Exchange	London	1,265,000 00	5,730 75	973 05
Standard Life and Accident	Detroit	7,557,600 00	34,661 08	6,850 44
Travelers	Hartford	12,280,645 00	51,014 20	40,217 42
Union Casualty and Surety Co.	St. Louis	2,631,067 00	16,136 88	3,080 16
United States Health and Accident	Saginaw	12,200 00	48 15	7 00
Totals		\$102,054,934 00	\$431,186 61	\$170,991 42

TABLE No. 12.

Showing the Business of Employers' Liability Insurance Companies for the year 1903—California Business.

Name.	Location.	Premiums Received.	Losses Paid.
Ætna Life	Hartford	\$11,250 00	\$430 50
Employers' Liability	London	78,166 75	22,625 30
Fidelity and Casualty	New York	31,545 21	13,374 44
Frankfort Marine, Accident and Plate Glass	Frankfort, Ger.	99,579 00	47,823 86
London Guarantee and Accident	London	18,999 16	3,895 65
Maryland Casualty	Baltimore	15,364 54	15,800 52
New Amsterdam Casualty	New York	32,050 49	7,908 86
Pacific Coast Casualty	San Francisco	102,771 27	21,883 77
Standard Life and Accident	Detroit	2,468 20	1,815 13
Totals		\$392,194 62	\$135,558 03

TABLE No. 13.

Showing the Fidelity and Surety Business for the year 1903—California Business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
Ætna Indemnity	Hartford	\$3,785,254 00	\$20,988 47	\$127 25
American Bonding	Baltimore	8,607,503 00	22,134 62	587 90
American Surety	New York	6,867,911 00	17,140 69	9,247 25
City Trust, Safe Deposit, and Surety	Philadelphia	796,780 00	5,851 38	229 28
Employers' Liability	London	234,500 00	1,242 60	None
Fidelity and Casualty	New York	1,134,650 00	4,062 88	5 00
Fidelity and Deposit	Baltimore	11,944,980 00	55,427 00	8,975 73
National Surety	New York	16,759,879 00	58,489 20	7,782 00
Pacific Surety	San Francisco	15,021,955 00	47,169 40	4,171 13
Union Surety and Guaranty	Philadelphia	2,538,675 00	11,699 70	None
U. S. Fidelity and Guaranty	Baltimore	16,252,729 00	51,997 93	263 32
Totals		\$83,994,816 00	\$296,203 87	\$31,388 86

TABLE No. 14.

Showing the Plate Glass Insurance Business for the year 1903—California Business.

Name.	Location.	Premiums Received.	Losses Paid.
Fidelity and Casualty	New York	\$5,905 81	\$1,255 11
Lloyd's Plate Glass	New York	3,166 19	1,699 71
Metropolitan Plate Glass	New York	4,740 22	1,480 08
Maryland Casualty	Baltimore	1,845 58	959 43
New Amsterdam Casualty	New York	643 56	None
New York Plate Glass	New York	16,984 23	5,964 49
Pacific Surety	San Francisco	3,835 28	607 07
Union Casualty and Surety	St. Louis	3,588 70	1,233 25
Totals		\$40,709 57	\$13,199 14

TABLE No. 15.

Showing the Steam Boiler Insurance Business for the year 1903—California Business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
Fidelity and Casualty	New York	\$1,154,000 00	\$6,512 15	\$1,245 00
Hartford Steam Boiler	Hartford	2,873,126 00	24,321 05	442 49
Maryland Casualty	Baltimore	130,000 00	1,325 13	None
Totals		\$4,157,126 00	\$32,158 33	\$1,687 49

TABLE No. 16.

Showing the Burglary Insurance Business for the year 1903—California Business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
Fidelity and Casualty	New York	\$645,175 00	\$6,236 34	\$812 05
Maryland Casualty	Baltimore	104,616 00	523 59	None
New Amsterdam Casualty	New York	106,850 00	1,254 38	None
United States Fidelity and Guaranty	Baltimore	1,108,300 00	6,704 65	1,390 00
Totals		\$1,964,941 00	\$14,718 96	\$2,202 05

TABLE No. 17.

Showing the Title Insurance Business for the year 1903—California Business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
California Title Insurance and Trust	San Francisco	\$11,936,125 00	\$82,695 03	\$762 15
Title Guarantee and Trust	Los Angeles	50,000 00	125 00	None
Title Insurance and Guaranty	San Francisco	4,814,088 00	38,535 50	219 40
Title Insurance and Trust	Los Angeles	2,897,945 00	5,219 25	920 14
Total		\$19,698,158 00	\$126,574 78	\$1,901 69

TABLE No. 18.

Showing the Credit Indemnity Insurance Business for the year 1903—California Business.

Name.	Location.	Amount Written.	Premiums on Same.	Losses Paid.
American Credit Indemnity	New York	\$611,500 00	\$41,580 00	\$9,419 61
Ocean Accident and Guarantee	London	228,500 00	16,900 00	16,241 54
Totals		\$840,000 00	\$58,480 00	\$25,661 15

TABLE No. 19.
Showing the Assessment Life and Sick Benefit Insurance Business for the year 1903—California Business.

Name.	Location.	New Policies Written.		Policies Renewed.		In Force December 31, 1903.		Losses Paid.
		No.	Amount.	Premiums on same.	No.	Amount.	Premiums on Same.	
Bankers' Life Association	Des Moines, Ia.	1,127	\$2,254,000 00	\$3,360 20	2,794	\$5,588,000 00	\$64,957 26	\$34,000 00
Decimal Mutual Life	San Francisco	None	-----	-----	21	21,000 00	330 00	None
Fidelity Mutual Aid Ass'n.	San Francisco	2,707	2,747,000 00	20,050 12	425	485,500 00	7,871 00	7,797 45
Totals	-----	3,834	\$5,001,000 00	\$23,410 32	3,240	\$6,094,500 00	\$73,158 26	\$41,797 45

TABLE No. 20.

Showing year of organization, location, names of President, Secretary, and Agent or Attorney for California, and date of certificate of authority issued by Insurance Commissioner, and date of commencement of business in California, of all Insurance Companies authorized to transact business, on Dec. 31, 1903.

Year Organized.	Name.	Location.	President.	Secretary.	Agent for California.	Date of Certificate Issued by Insurance Commissioner.	Commenced Business in California.
1863	Fireman's Fund	San Francisco.	Wm. J. Dutton	Louis Weinmann		June 24, 1868	June 18, 1863
1864	Home Fire and Marine	San Francisco.	Wm. J. Dutton	Franklin Bangs		June 21, 1868	June 13, 1864
1865	Aachen and Munich Fire	San Francisco.	J. A. Kelsey, U. S. Manager			April 21, 1863	April 21, 1863
1819	Atlas	Hartford	Wm. B. Clark	Wm. H. King	Cassius Bertheau	June, 1868	June 20, 1865
1860	Austrian Phoenix	Vienna	Wm. B. Clark	Dr. Carl Biel	Dickson Thome	Oct. 20, 1903	Oct. 20, 1903
1863	Agricultural	Watertown, N. Y.	A. H. Sawyer	W. H. Stevens	Edward Brown	Aug. 17, 1897	Aug. 2, 1876
1890	Alliance	Berlin	Carl Thome	P. Srelinski	Gutte & Frank	Dec. 22, 1892	Dec. 22, 1892
1821	Alliance Marine	London	C. F. Mullins, U. S. Manager	Douglas Owen	C. F. Mullins	June 2, 1892	June 2, 1892
1816	American	Newark	Lord Rothschild	J. H. Worden	J. J. Moore	May 24, 1881	May 24, 1881
1815	American Central	Boston	E. O. Doremus	H. S. Rean	Christenson, Edwards & Goodwin	Aug. 21, 1896	Aug. 21, 1896
1853	American Fire	St. Louis.	Francis Peabody	J. H. Worden	C. J. Stovel	Dec. 23, 1897	Dec. 23, 1897
1810	American and Foreign Marine	Philadelphia.	Geo. T. Crum	Jno. H. Adams	C. Christensen	April 15, 1874	April 15, 1874
1896	American and Foreign Marine	New York	T. H. Montgomery	J. E. Hoffman	Edward Brown	Oct. 31, 1872	Oct. 31, 1872
1897	Assurance Co. of America.	New York	W. L. H. Simpson	C. S. Conklin	Ballour, Guthrie & Co.	July 21, 1898	July 21, 1898
1808	Atlas	London	J. P. Currie	S. J. Pipkin	C. A. Hevlin & Co.	July 9, 1897	July 9, 1897
1862	Australian Alliance	Melbourne	George Shaw	E. S. Watson	Parrott & Co.	Aug. 15, 1885	Aug. 15, 1885
1874	Beloise Marine	Bastie	R. Iselin	Thos. Raden	Louis Rosenthal	Sept. 11, 1902	Sept. 11, 1902
1873	Boston	Toronto	Geo. A. Cox	Thos. H. Lord	H. J. Knowles	Nov. 28, 1876	Nov. 28, 1876
1833	British America	Liverpool	Richard Hobson	P. H. Sims	Watson, Taylor & Sperry	Aug. 22, 1882	Aug. 22, 1882
1863	British and Foreign Marine	Edinburgh	Chas. H. Post, U. S. Manager	A. McNeil	Ballour, Guthrie & Co.	Mar. 11, 1875	Mar. 11, 1875
1865	Caledonian	New York	Chas. H. Post	G. A. McNeil	Thos. J. Conroy	Oct. 10, 1868	Oct. 10, 1868
1897	Caledonian-American	New York	Chas. H. Post	G. A. McNeil	Thos. J. Conroy	July 24, 1885	July 24, 1885
1881	Canton	Hong Kong	Geo. Brunner	F. Damkoecher	Parrott & Co.	Dec. 21, 1888	Dec. 21, 1888
1870	Concordia Fire	Milwaukee	Evan Ormiston	J. Whitall	F. W. Dickson	June 21, 1882	June 21, 1882
1865	China Traders	Hong Kong	S. E. Waggoner	John H. Carr	Williams, Dimond & Co.	May 9, 1903	May 9, 1903
1867	Citizens	St. Louis	A. H. Wray, U. S. Manager	John H. Carr	Palache & Hewitt	Sept. 4, 1871	Sept. 4, 1871
1861	Commercial Union	London	A. H. Wray	C. J. Holman	C. F. Mullins	April 22, 1901	April 22, 1901
1890	Commercial Union Fire	New York	A. H. Wray	C. J. Holman	C. F. Mullins	June 22, 1870	June 22, 1870
1892	Connecticut Fire	Hartford	Henry Evans	J. E. Lopez	Benj. J. Smith	June 1, 1896	June 1, 1896
1852	Continental	New York	T. Paulding	J. E. Lopez	Arthur G. Nason	Aug. 20, 1873	Aug. 20, 1873
1836	Dutchess	Poughkeepsie	L. H. Vail	H. Jyburn	Edward Brown	Sept. 1, 1872	Sept. 1, 1872
1859	Equitable Fire and Marine	Providence, R. I.	F. W. Arnold	J. J. Graham	C. J. Stovel	May 3, 1900	May 3, 1900
1901	Federal	Jersey City	Percy Chubb	J. E. Thillinghast	Wm. J. Dutton	Mar. 15, 1901	Mar. 15, 1901
1820	Fire Association	Philadelphia	E. C. Irvin	M. Grandner	F. C. Gibbons	June 28, 1890	June 28, 1890
1825	Firemen's	Baltimore	F. E. S. Wolfe	M. G. Garrigue	Gutte & Frank	Dec. 18, 1902	Dec. 18, 1902
1879	Fonclere	Paris	E. Robert	Harry L. Ryall	C. J. Stovel	Dec. 9, 1873	Dec. 9, 1873
1829	Franklin Fire	Philadelphia	E. Seris	J. C. Wilson	J. C. Wilson	Oct. 15, 1902	Oct. 15, 1902
1865	German	Freeport, Ill.	Wm. McAllister	E. T. Cresson	Geo. F. Grant	Nov. 20, 1880	Nov. 20, 1880
1897	German Alliance	New York	C. O. Collmann	W. Trembor	C. H. Ward	May 15, 1885	May 15, 1885
			Wm. N. Kremer	C. G. Smith	Geo. H. Tyson	Sept. 28, 1900	Sept. 28, 1900
						Mar. 8, 1897	Mar. 8, 1897

1872	German-American	New York	Wm. N. Kremer	C. G. Smith	Geo. H. Tyson	Oct. 10, 1873	Oct. 10, 1873
1876	German Fire	Peoria	B. Cremer	Chas. Cremer	Gutte & Frank	Nov. 28, 1902	Nov. 28, 1902
1879	Germania Fire	New York	Hugo Schumann	C. Ruykhaer	W. H. Breeding	Aug. 29, 1900	Aug. 29, 1900
1889	Globe and Rutgers Fire	Glens Falls	J. L. Cunningham	R. A. Little	E. E. Potter	Jan. 31, 1900	Jan. 31, 1900
1889	Greenwich	New York	E. C. Jameson	Lyman Candee	Edward Brown	Nov. 28, 1902	Nov. 28, 1902
1884	Hamburg-Bremen Fire	Hamburg	M. A. Stone	W. B. Ward	Tom C. Grant	June 10, 1890	June 10, 1890
1884	Hanover Fire	Hartford	E. O. Afield, U. S. Man	J. McCord	Rudolph Herold, Jr.	Sept. 26, 1868	May 4, 1862
1880	Hartford Fire	New York	C. A. Shaw	P. C. Royce	Caspar Berthau	Oct. 25, 1869	Oct. 25, 1869
1852	Helvetia General	St. Gall	F. Haltmayer	M. J. Grossmann	Palache & Hewitt	Jan. 17, 1870	Jan. 17, 1870
1861	Helvetia Swiss Fire	St. Gall	W. H. Washburn	Managers	Louis Rosenthal	Nov. 26, 1876	Nov. 26, 1876
1833	Home	New York	J. H. Takel	A. M. Burtis	Syz & Co.	Dec. 6, 1876	Dec. 6, 1876
1893	Imperial Marine	Tokio	J. M. Hare	J. H. Burger	Harry L. Roff	Nov. 13, 1868	Nov. 13, 1868
1897	Indemnity Fire	New York	S. H. Curtis	J. T. Mailand	Macandray & Co.	June 20, 1898	June 20, 1898
1824	Indemnity Mutual Marine	London	Chas. Platt	G. E. Fryer	Wm. H. Lowden	July 18, 1901	July 18, 1901
1794	Ins. Co. of North America	Philadelphia	Frank Lock	C. J. Wolf	Evan C. Evans	Oct. 11, 1888	Oct. 11, 1888
1858	Kings County Fire	New York	Hall & Henshaw, U. S.	Managers	F. J. Devlin	Oct. 11, 1872	Oct. 11, 1872
1825	Law Union and Crown	London	H. W. Eaton, U. S. Man	Managers	Cotton, Bell & Co.	July 13, 1898	July 13, 1898
1826	Liverpool and London and Globe	Liverpool	Chas. L. Case, U. S. Man	Managers	Chas. D. Haven	Sept. 26, 1868	May 1, 1862
1720	Liverpool and London and Lancashire Fire	Liverpool	A. G. Mellwaine, Jr., U. S.	S. Manager	Wm. J. Landers	Aug. 28, 1872	Aug. 28, 1872
1861	London and Lancashire Fire	Liverpool	F. W. Lunan	H. S. B. Cooley	Wm. Macdonald	Nov. 6, 1879	Nov. 6, 1879
1860	London & Prov. Marine & Gen'l	London	G. S. A. Young, U. S.	Manager	Thos. J. Gourey	April 22, 1880	April 22, 1880
1874	Manchester	Manchester	F. C. K. Fleischmann	Manager	W. H. Le Boyteux	Nov. 10, 1884	Nov. 10, 1884
1820	Mannheim	Manheim	G. Hermann, U. S.	Manager	Wing Tuck & Co.	Oct. 31, 1881	Oct. 31, 1881
1870	Man On	Hong Kong	Kwan Fong Kok	Chan Shi Ki	G. W. McNear & Co.	Sept. 11, 1877	Sept. 11, 1877
1831	Marine	London	F. C. K. Fleischmann	H. G. R. Manghan	Livingston, Smith & Co.	July 3, 1874	July 3, 1874
1836	Maritime	Liverpool	E. H. Cookson	J. S. Nicholson	C. Christensen	Mar. 3, 1898	Mar. 3, 1898
1864	Mechanics	Boston	Geo. T. Chan	J. S. Nicholson	C. Christensen	May 1, 1901	May 1, 1901
1823	Mechanics Fire and Marine	Detroit	D. M. Ferry	E. J. Booth	C. A. Henry & Co.	April 12, 1891	April 12, 1891
1881	Michigan Fire and Marine	Milwaukee	Wm. L. Jones	B. R. Griebing	L. L. Bromwell	Aug. 5, 1884	Aug. 5, 1884
1852	Milwaukee Mechanics	Hartford	Jas. Nichols	B. R. Stillman	Geo. D. Dornin	July 9, 1897	July 9, 1897
1871	National Fire	New York	R. B. Rathbone	E. E. Pieper	C. A. Henry & Co.	Nov. 28, 1902	Nov. 28, 1902
1896	National Standard	Pittsburg	James H. Willock	E. E. Cole	Arthur G. Nason	Jan. 2, 1900	Jan. 2, 1900
1901	National Union Fire	The Hague	Weed & Kennedy, U. S.	Managers	Wm. Macdonald	May 2, 1900	May 2, 1900
1845	Netherlands Fire and Life	Manchester	A. E. Crosby	F. W. Sargeant	George H. Tyson	Mar. 15, 1901	Mar. 15, 1901
1869	New Hampshire Fire	New York	Aug. Colson	Chas. A. Hull	C. J. Stovel	Mar. 27, 1875	Mar. 27, 1875
1832	New York Fire	Auckland	Clinton Folger, U. S.	Manager	Clinton Folger	Oct. 18, 1878	Oct. 18, 1878
1850	Niagara Fire	New York	H. H. Erick	Geo. W. Dewey	Wm. J. Landers	Oct. 9, 1903	Oct. 9, 1903
1857	Nord Deutsche	Hamburg	L. Sanders	A. Duncker	N. T. James	Sept. 26, 1868	Sept. 26, 1868
1809	North British and Mercantile	London	W. T. Price	R. Carmichael	Tom C. Grant	June 13, 1876	June 13, 1876
1833	North China	Shanghai	W. H. Prite	W. G. Byrne	Macandray & Co.	Sept. 26, 1867	Sept. 26, 1867
1836	Northern	London	H. E. Wilson, U. S.	Manager	Walter J. Wilson	May 1, 1862	May 1, 1862
1868	North German Fire	Hamburg	J. Nordheim	J. Bueschke	Walter Speyer	Sept. 20, 1877	Sept. 20, 1877
1899	North German Fire	New York	Adolph Loeb	H. C. Timm	Walter Speyer	June 8, 1899	June 8, 1899
1863	Northwestern National	Milwaukee	Alfred James	W. D. Reed	G. W. Turner	Feb. 27, 1889	Feb. 27, 1889
1797	Norwich Union Fire	Norwich, Eng.	F. A. Cubitt	C. A. B. Bignold	W. H. Lowden	July 13, 1877	July 13, 1877
1830	Ocean Marine	London	A. G. Campbell	Alfred Price	Geo. A. Newhall	June 20, 1890	June 20, 1890
1867	Orient	Hartford	A. H. Mellwaine, Jr.	James Wyper	Wm. Macdonald	Mar. 10, 1891	Mar. 10, 1891
1900	Palatine	London	A. H. Wray, U. S.	Manager	C. F. Mullins	Jan. 3, 1901	Jan. 3, 1901
1899	Peltana	New York	A. D. Trving	L. P. Bayard	Geo. E. Butler	May 17, 1899	May 17, 1899
1825	Pennsylvania Fire	Philadelphia	R. D. Benson	W. G. Crowell	R. W. Osborn	Dec. 20, 1875	Dec. 20, 1875
1853	Phoenix	Brooklyn	Geo. P. Sheldon	W. A. Wright	A. C. Olds	Nov. 9, 1868	Nov. 9, 1868
1854	Phoenix	Hartford	D. W. C. Skilton	E. Milligan	George H. Tyson	July 16, 1868	July 16, 1868

TABLE No. 20—CONTINUED.

Year Organized.	Name.	Location.	President.	Secretary.	Agent for California.	Date of Certificate Issued by Insurance Commissioner.	Commenced Business in California.
1782	Phoenix.....	London.....	A. D. Irving, U. S. Manager	Un Lai Chuen.....	Geo. E. Rutler.....	Dec. 22, 1879	Dec. 22, 1879
1789	Po On.....	Hong Kong.....	Chu Kiang Wan.....	S. G. Howe.....	Lu Kwong Way.....	Dec. 11, 1896	Dec. 11, 1896
1799	Providence-Washington.....	Providence, R. I.....	J. H. De Wolf.....	S. G. Howe.....	Geo. E. Rutler.....	Dec. 31, 1874	Dec. 31, 1874
1845	Prussian National.....	Stettin.....	Theo. W. Letton, U. S. Manager	Manager.....	W. Lomza.....	Nov. 13, 1881	Nov. 13, 1881
1849	Queen.....	New York.....	E. F. Beddall.....	N. S. Bartow.....	Rolla V. Watt.....	Oct. 12, 1891	Oct. 12, 1891
1881	Reliance Marine.....	Liverpool.....	Walter Glynn.....	F. R. Edwards.....	Henry Lund, Jr.....	Dec. 19, 1881	Dec. 19, 1881
1881	Rhine and Moselle Fire.....	Strasbourg.....	F. Schaller.....	E. Mathis.....	Syz & Co.....	Oct. 19, 1881	Oct. 19, 1881
1872	Rochester German.....	Rochester, N. Y.....	Frederick Cook.....	H. F. Atwood.....	Thos. J. Courroy.....	Aug. 29, 1902	Aug. 29, 1902
1845	Royal.....	Liverpool.....	E. F. Beddall, U. S. Manager	Manager.....	Rolla V. Watt.....	Feb. 10, 1902	Feb. 10, 1902
1720	Royal Exchange.....	London.....	Robert Dickson, U. S. Manager	Manager.....	F. W. Dickson.....	June 23, 1869	June 23, 1869
1824	Scottish Union and National.....	Edinburgh.....	Geo. H. Brewster, U. S. Manager	Manager.....	T. J. A. Tredemann.....	May 20, 1891	May 20, 1891
1875	Sea.....	Liverpool.....	Jas. Gilmore.....	W. A. Edwards.....	Meyer, Wilson & Co.....	July 19, 1881	July 19, 1881
1849	Springfield Fire and Marine.....	Springfield, Mass.....	A. W. Damon.....	W. J. Mackay.....	Geo. D. Dornin.....	July 19, 1876	July 19, 1876
1835	Spring Garden.....	Philadelphia.....	C. E. Porter.....	E. L. Goff.....	F. W. Dickson.....	April 6, 1881	April 6, 1881
1871	Standard Marine.....	Liverpool.....	J. Williamson.....	John Glick.....	Geo. D. Dornin.....	May 1, 1903	May 1, 1903
1865	State Fire.....	St. Paul.....	Hall & Henshaw, U. S. Managers	Managers.....	W. Macdonald.....	June 28, 1881	June 28, 1881
1710	St. Paul Fire and Marine.....	London.....	J. J. Gulie, U. S. Manager	A. W. Perry.....	C. Christensen.....	Nov. 1, 1899	Nov. 1, 1899
1866	Svea Fire and Life.....	Gothenburg, Sweden.....	A. Wikander.....	Ernst Bring.....	C. A. Henry & Co.....	Sept. 23, 1872	Sept. 23, 1872
1869	Switzerland General.....	Zurich.....	W. H. Diethelm.....	J. G. Blum.....	Ed. Brown.....	Feb. 26, 1886	Feb. 26, 1886
1871	Teutonia.....	New Orleans.....	Albert Noll.....	F. Laughebein.....	Louis Rosenthal.....	Sept. 22, 1884	Sept. 22, 1884
1860	Thames and Mersey.....	Liverpool.....	H. W. Hind.....	J. Kidman.....	Mann & Wilson.....	Oct. 7, 1874	Oct. 7, 1874
1853	Thuringia.....	Erfurt, Germany.....	F. G. Voss, U. S. Manager	Manager.....	Wm. Greer Harrison.....	April 18, 1879	April 18, 1879
1865	Transatlantic Fire.....	Chicago.....	T. J. Lefkus.....	S. A. Roethermel.....	Voss, Conrad & Co.....	Aug. 21, 1876	Aug. 21, 1876
1872	Union.....	Hamburg.....	J. Blumberger, U. S. Manager	Manager.....	James Frazer.....	Nov. 16, 1896	Nov. 16, 1896
1804	Union.....	Philadelphia.....	C. S. Hollinshead, U. S. Managers	Managers.....	Y. C. Driffell.....	June 6, 1873	June 6, 1873
1714	Union.....	London.....	Hall & Henshaw, U. S. Managers	Managers.....	R. W. Osborn.....	Oct. 1, 1880	Oct. 1, 1880
1863	United Marine.....	Liverpool.....	T. R. Royden.....	J. S. Allen.....	Carlton, Bell & Co.....	May 20, 1889	May 20, 1889
1860	United Pirene's.....	Philadelphia.....	F. Beath.....	D. J. Sweeney.....	E. L. Woods.....	July 3, 1874	July 3, 1874
1889	Universo Marine.....	Milan.....	F. Bertarelli.....	C. Vuillommet.....	Gutts & Frank.....	April 16, 1901	April 16, 1901
1886	Upper Rhine.....	Mannheim.....	L. A. Baum.....	Oscar Sternberg.....	John S. Wilson.....	Nov. 17, 1889	Nov. 17, 1889
1896	Victoria Fire.....	New York.....	H. H. Hall.....	E. K. Beddall.....	Oscar Thibone.....	Aug. 20, 1903	Aug. 20, 1903
1837	Westchester Fire.....	New York.....	G. R. Crawford.....	M. C. Brown.....	Carlton, Bell & Co.....	Mar. 14, 1899	Mar. 14, 1899
1851	Western.....	Toronto.....	Geo. A. Cox.....	C. C. Foster.....	E. E. Potter.....	Mar. 20, 1885	Mar. 20, 1885
1898	West'n Underwriters' Ass'n, Inc.....	Chicago.....	Wm. Trembur.....	Wm. Foeller.....	Watson, Taylor & Sperry.....	Jan. 12, 1877	Jan. 12, 1877
1872	Wilhelma.....	Munich.....	T. Dammann, U. S. Manager	Manager.....	G. H. Ward.....	Jan. 28, 1903	Jan. 28, 1903
1853	Williamsburg City Fire.....	Brooklyn.....	M. S. Briggs.....	F. H. Way.....	Gutts & Frank.....	Aug. 31, 1878	Aug. 31, 1878
1894	Worlds Marine.....	London.....	Sir Chris. Furness.....	F. Silverlock.....	E. E. Potter.....	Feb. 12, 1881	Feb. 12, 1881
1862	Yangtze.....	Shanghai.....	Jas. M. Young.....	W. S. Jackson.....	Macdonay & Co.....	Mar. 14, 1903	Mar. 14, 1903
1820	Yama Life.....	Hartford.....	M. G. Bulkeley.....	J. L. English.....	Balfour, Guthrie & Co.....	Oct. 23, 1868	Oct. 23, 1868
1902	Columbian National Life.....	Boston.....	Percy Parker.....	F. J. Willis.....	E. H. L. Gregory.....	Mar. 12, 1879	Mar. 12, 1879
1846	Connecticut Mutual Life.....	Hartford.....	J. L. Green.....	H. H. White.....	T. C. Van Ness.....	Oct. 5, 1903	Oct. 5, 1903
1900	Conservative Life.....	Los Angeles.....	Frederick H. Rindge.....	A. W. Morgan.....	A. K. P. Harmon.....	June 21, 1880	June 21, 1880
1859	Equitable Life.....	New York.....	Jas. W. Alexander.....	Wm. Alexander.....	A. M. Shields.....	July 5, 1900	July 5, 1900

1900.	Fidelity Mutual Life	Philadelphia.	L. G. Fouse.	W. S. Campbell	G. A. Rathbun	April 27, 1900.	April 29, 1900
1860.	Germania Life.	New York	C. Doremus	Carl Heye	W. A. Jacobs	Feb. 11, 1879.	Feb. 11, 1879
1866	Hartford	New York	Geo. E. Keeney	Chas. H. Bocal	Lucius R. Parker	May 7, 1903	May 7, 1903
1860.	Home Life	New York	H. P. Townsend	E. W. Gladwin	Frank Merling	Oct. 11, 1887	Oct. 11, 1887
1903.	Life Association of America	New York	H. P. Townsend	C. W. Townsley	Paul M. Nippert	Dec. 9, 1903	Dec. 9, 1903
1850.	Manhattan Life	New York	H. B. Stokes	J. H. Griffin	John Landers	Aug. 2, 1878	Aug. 2, 1878
1851.	Massachusetts Mutual Life.	Springfield	John A. Hall	H. M. Phillips	C. M. T. Parker	May 20, 1891	May 20, 1891
1866	Metropolitan Life.	New York	J. R. Hegeman	Jas. S. Roberts	J. R. Richardson	Sept. 14, 1901	Sept. 14, 1901
1880.	Minnesota Mutual Life.	St. Paul	T. R. Palmer	Douglas Putnam	Jos. A. Peters	Sept. 13, 1902	Sept. 13, 1902
1842	Mutual Life.	New York	E. A. McCurdy	W. J. Easton	Stanley Forbes	July 1, 1878	July 1, 1878
1845.	Mutual Benefit Life	Newark	F. Frelinghuysen	E. L. Dobbins	Pickering & Stiles	Sept. 7, 1880	Sept. 7, 1880
1848.	National Life	Montpelier, Vt.	Jos. A. De Boer	O. D. Clark	G. M. Stolp	June 21, 1886	June 21, 1886
1855.	New England Mutual Life	Boston	B. F. Stevens	S. F. Trull	Henry K. Field	June 17, 1867	June 17, 1867
1841.	New York Life.	New York	John A. McCall	Chas. A. McLane	Chas. A. McLane	Aug. 20, 1878	Aug. 20, 1878
1857.	Northwestern Mutual Life	Milwaukee	H. L. Palmer	J. W. Skinner	C. M. Smith	May 31, 1882	May 31, 1882
1885.	Northwestern National Life	Minneapolis	W. F. Bechtel	F. J. Sackett	O. W. Wiles	Dec. 11, 1901	Dec. 11, 1901
1867.	Pacific Mutual Life	San Francisco	Geo. A. Moore	S. M. Marks	E. H. Hart	Feb. 24, 1888	Feb. 24, 1888
1847	Penn Mutual Life	Hartford	H. F. West.	H. C. Brown	J. W. Hicks	Aug. 20, 1880	Aug. 20, 1880
1851.	Phoenix Mutual Life	Hartford	J. B. Bunce	Wm. A. Moore	Vail & Eldridge	Mar. 27, 1902	Mar. 27, 1902
1865	Provident Life and Trust	Philadelphia	S. R. Shipley	C. W. Borton	Carl C. Gross	Oct. 17, 1888	Oct. 17, 1888
1875.	Provident Savings Life	New York	E. W. Scott	W. E. Stevens	A. F. MacFarland	Feb. 2, 1901	Feb. 2, 1901
1878.	Prudential	Newark	John F. Dryden	Edward Gray	Geo. W. Phelps	April 3, 1901	April 3, 1901
1884.	State Life	Indianapolis	A. M. Sweeney	W. S. Wynn	Chas. A. LaDue	July 9, 1878	July 9, 1878
1886.	Security Mutual Life.	Binghamton, N. Y.	Chas. M. Turner	J. E. Morris	H. A. Hunsaker	Feb. 25, 1885	Feb. 25, 1885
1863.	Travelers.	Hartford	S. C. Druhan	E. P. Marshall	W. C. Leavitt	Sept. 11, 1868	Sept. 11, 1868
1867.	Union Central Life	Cincinnati	J. M. Pattison	J. Frank Lang	Howard Perrin	Feb. 5, 1881	Feb. 5, 1881
1848.	Union Mutual Life	Portland, Me.	F. E. Richards	G. H. Brower	G. F. Wink	July 10, 1891	July 10, 1891
1870.	Washington Life	New York	W. A. Brewer, Jr.	H. S. Nolen		Nov. 10, 1898	Nov. 10, 1898
1860.	Bankers' Life Association.	Des Moines	E. A. Temple	W. S. Parry		May 15, 1891	May 15, 1891
1848.	Decimal Mutual Life	San Francisco	Wm. H. Busch	J. L. M. Shetterly	J. C. Brustie	Aug. 24, 1898	Aug. 24, 1898
1887.	Fidelity Mutual Aid Ass'n	Hartford	C. N. Nevlin	E. S. Pagan	F. B. Lloyd	Feb. 6, 1900	Feb. 6, 1900
1895.	Etina Indemnity	Baltimore	Jas. Bond	S. H. Shriver	Chas. L. Currier	Feb. 15, 1897	Feb. 15, 1897
1893.	American Bonding	New York	E. H. Winslow	S. M. Pichan	Harry W. Lobb	Dec. 5, 1884	Dec. 5, 1884
1881.	American Credit Indemnity	New York	S. M. Pichan	H. B. Zevely		Mar. 11, 1887	Mar. 11, 1887
1884.	American Surety	New York	H. L. Lyman	C. M. Keeney	Jas. C. Hayburn	June 9, 1893	June 9, 1893
1886.	California Title Ins. & Trust.	San Francisco	H. L. Davis	C. H. Laird	Wm. H. Belt	Mar. 14, 1902	Mar. 14, 1902
1886.	City Trust, Safe Deposit, & S'ty.	Philadelphia	C. M. Swain	A. A. Smith	C. J. O'Reil	June 20, 1887	June 20, 1887
1887.	Continental Casualty	Hannond, Ind.	C. H. Bunker	R. J. Hillas	H. A. Wagner	June 23, 1894	June 23, 1894
1880.	Employers' Liability	New York	S. Appleton, U. S. Manager	H. Nicodemus	Voss & Conrad	Nov. 6, 1881	Nov. 6, 1881
1876.	Fidelity and Casualty	New York	G. F. Seward	J. B. Pierce	J. S. Wilson	Dec. 6, 1887	Dec. 6, 1887
1890.	Fidelity and Deposit	Baltimore	F. Warfield	C. E. W. Chambers	C. Christensen	Oct. 17, 1892	Oct. 17, 1892
1866.	Frankfort Mar. Acct. & Plate Gl.	Frankfort, Ger.	F. G. Voss, U. S. Manager	Jas. F. Mitchell	E. C. Landis	Dec. 6, 1898	Dec. 6, 1898
1866.	Hartford Steam Boiler.	Hartford	F. M. Allen	S. W. Burton	W. B. Hill	May 8, 1879	May 8, 1879
1882.	Lloyd's Plate Glass	New York	W. T. Woods	John T. Stone	John S. Wilson	July 20, 1894	July 20, 1894
1869.	London Guarantee and Accid't	London	A. W. Masters, U. S. Manager	G. McCall	F. B. Lloyd	Oct. 2, 1899	Oct. 2, 1899
1898.	Maryland Casualty	Baltimore	John T. Stone	B. E. Taylor	C. B. Sloan	May 6, 1891	May 6, 1891
1874.	Metropolitan Plate Glass.	New York	E. H. Winslow	M. A. White	Voegt & Neilan	Dec. 22, 1898	Dec. 22, 1898
1897.	Metropolitan Surety	New York	Chas. A. Dean	Oscar Ising, U. S. Manager			
1898.	New Amsterdam Casualty	New York	W. F. Moore				
1891.	New York Plate Glass	New York	E. C. Waller				
1895.	North American Accident	Chicago					
1895.	Ocean Accident and Guarantee.	London.					

TABLE No. 20—CONTINUED.

Year Organized.	Name.	Location.	President.	Secretary.	Agent for California.	Date of Certificate Issued by Insurance Commissioner.	Commenced Business in California.
1902	Pacific Coast Casualty	San Francisco	E. F. Green	F. A. Zane		Nov. 22, 1902	Nov. 22, 1902
1885	Pacific Surety	San Francisco	Wallace Everson	A. P. Redding		Aug. 4, 1885	Aug. 4, 1885
1893	Preferred Accident	New York	P. C. Lounsbury	K. C. Atwood		June 12, 1893	June 12, 1893
1884	Standard Life and Accident	Detroit	D. M. Ferry	E. A. Leonard	Thos. Goodwin	Nov. 12, 1894	Nov. 12, 1894
1902	Title Insurance and Guaranty	San Francisco	O. A. Rouleau	H. B. Montague	C. F. Briggs	Nov. 12, 1894	Nov. 12, 1894
1893	Title Insurance and Trust	Los Angeles	W. H. Allen, Jr.	O. P. Clark		July 31, 1902	July 31, 1902
1895	Title Guarantee and Trust	Los Angeles	John D. Pope	L. C. Brand		Nov. 25, 1895	Nov. 25, 1895
1901	Title Guaranty and Trust	Scranton, Pa.	L. A. Waters	D. B. Atherton		Dec. 17, 1903	Dec. 17, 1903
1892	Union Casualty and Surety	St. Louis	Edw. Cluff	L. L. Atwood	Paul M. Nippert	July 15, 1903	July 15, 1903
1896	U. S. Fidelity and Guaranty	Baltimore	J. R. Bland	G. R. Callis	T. M. Morgan	Sept. 2, 1893	Sept. 2, 1893
1900	U. S. Health and Accident	Saginaw, Mich	J. B. Ficher	V. D. Cligg	John H. Robertson	June 10, 1897	June 10, 1897
					F. J. Todd	Sept. 5, 1903	Sept. 5, 1903

TABLE No. 21.

Summary of Assets, Liabilities, Incomes, Expenditures, etc., of Fire and Marine Insurance Companies doing business in California on December 31, 1903—California Companies.

Name.	Location.	Cash Capital Paid Up.	Assets.	Liabilities, Capital not Included.	Incomes.	Expenditures, incurred during the Year.	Losses Incurred during the Year.	Net Surplus.
Fireman's Fund	San Francisco	\$1,000,000 00	\$5,773,964 24	\$2,662,610 89	\$3,470,787 53	\$2,830,823 50	\$1,654,642 44	\$2,111,353 35
Home Fire and Marine	San Francisco	300,000 00	1,495,869 43	794,405 94	1,065,257 14	918,576 44	517,770 61	401,463 49
Totals		\$1,300,000 00	\$7,269,833 67	\$3,457,016 83	\$4,536,044 67	\$3,749,399 94	\$2,172,413 05	\$2,512,816 84

TABLE No. 22.

Showing the various items composing the Assets of Fire and Marine Insurance Companies doing business in California on December 31, 1903—California Companies.

Name.	Location.	Real Estate.	Mortgage Loans.	Stocks and Bonds.	Collateral Loans.	Cash in Office and Banks.	Interest Due and Accrued.	Premiums in Course of Collection.	Bills Receivable, not Matured, Taken for Marine Risks.	All Other Assets.	Total Assets.
Fireman's Fund	San Fran.	\$518,000 00	\$188,312 50	\$3,603,430 00	\$462,500 00	\$311,385 35	\$3,757 45	\$657,808 82	\$46,300 02	\$22,560 78	\$5,773,964 24
Home Fire and Marine	San Fran.	105,000 00	177,180 00	904,491 00	15,050 00	100,833 35	1,395 50	183,828 14	5,238 40	2,853 04	1,495,869 43
Totals		\$623,000 00	\$365,492 50	\$4,507,921 00	\$477,550 00	\$412,218 70	\$5,152 95	\$841,636 96	\$51,538 42	\$25,413 82	\$7,269,833 67

TABLE No. 23.

Showing the various items composing the Liabilities, except Capital Stock, of Fire and Fire and Marine Insurance Companies doing business in California on December 31, 1903—California Companies.

Name.	Location.	Losses Adjusted.	Losses Unadjusted.	Losses Resisted.	Fire Reinsurance.	Marine Reinsurance.	All Other Claims.	Total Liabilities.	Net Surplus.
Fireman's Fund	San Francisco ..	\$56,644 36	\$180,886 62	\$4,550 00	\$2,101,333 78	\$234,908 33	\$84,287 80	\$5,773,964 24	\$2,111,353 35
Home Fire and Marine ..	San Francisco ..	20,687 03	33,445 86	5,350 00	682,464 80	17,380 58	27,573 16	1,495,869 43	401,463 49
Totals .....	.....	\$77,331 39	\$214,332 48	\$9,900 00	\$2,783,798 58	\$252,288 91	\$111,860 96	\$7,269,833 67	\$2,512,816 84

TABLE No. 24.

Showing the various items composing the Incomes of Fire and Fire and Marine Insurance Companies doing business in California on December 31, 1903—California Companies.

Name.	Location.	Fire Premiums.	Marine Premiums.	Interest on Mortgages.	Interest from Other Sources.	Rents.	All Other Sources.	Total Income.
Fireman's Fund	San Francisco ..	\$2,724,792 10	\$534,361 98	\$15,870 85	\$170,500 34	\$25,259 26	-----	\$3,470,787 53
Home Fire and Marine ..	San Francisco ..	948,960 71	50,452 30	9,786 39	43,081 75	4,968 90	\$8,007 09	1,065,287 14
Totals .....	.....	\$3,673,752 81	\$584,817 28	\$25,657 24	\$213,582 09	\$30,228 16	\$8,007 09	\$4,536,044 67

TABLE No. 25.

Showing the various items composing the Expenditures of Fire and Fire and Marine Insurance Companies doing business in California on December 31, 1903—California Companies.

Name.	Location.	Fire Losses.	Marine Losses.	Dividends.	Commissions and Brokerage.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures.
Fireman's Fund	San Francisco ..	\$1,283,668 07	\$311,384 62	\$120,000 00	\$484,745 61	\$287,708 99	\$79,097 06	\$254,229 15	\$2,830,823 50
Home Fire and Marine ..	San Francisco ..	463,761 12	40,975 44	36,000 00	185,663 43	112,351 62	22,488 43	57,336 40	918,576 44
Totals .....	.....	\$1,757,429 19	\$352,360 06	\$156,000 00	\$670,409 04	\$400,060 61	\$101,585 49	\$311,565 55	\$3,749,399 94

TABLE No. 26.

Showing amount of Risks Written, Premiums Received, and amount of Risks in Force on December 31, 1903, with Premiums thereon, of Fire and Fire and Marine Insurance Companies doing business in California—California Companies.

Name.	Location.	RISKS WRITTEN DURING THE YEAR.			
		Fire.	Premiums.	Marine.	Total Premiums.
Fireman's Fund.....	San Francisco.....	\$304,385 272 00	\$3,937,632 76	\$157,595,535 00	\$5,002,969 95
Home Fire and Marine.....	San Francisco.....	95,295,545 00	1,404,284 91	5,686,373 00	1,469,537 83
Totals.....	.....	\$399,680,817 00	\$5,341,916 67	\$163,281,908 00	\$6,472,507 78

Name.	Location.	RISKS IN FORCE DECEMBER 31, 1903.			
		Fire.	Premiums.	Marine.	Total Premiums.
Fireman's Fund.....	San Francisco.....	\$316,947,550 00	\$4,069,860 27	\$7,427,196 00	\$4,304,768 60
Home Fire and Marine.....	San Francisco.....	94,966,533 00	1,320,041 17	638,029 00	1,351,566 57
Totals.....	.....	\$411,914,083 00	\$5,389,901 44	\$8,065,225 00	\$5,656,325 15

TABLE No. 27.

Summary of Assets, Liabilities, Incomes, Expenditures, etc., and amount of Surplus over Capital Stock of Fire and Marine Insurance Companies doing business in California on December 31, 1903—Companies of other States.

Name.	Location.	Cash Capital Paid Up.	Assets.	Liabilities, Capital Not Included.	Incomes.	Expenditures.	Losses Incurred During the Year.	Net Surplus.
Ætna	Hartford	\$4,000,000 00	\$15,190,888 15	\$5,220,320 94	\$6,031,251 11	\$5,165,148 22	\$2,734,910 36	\$5,970,567 21
Agricultural	Watertown, N.Y.	500,000 00	2,668,555 21	1,456,958 63	1,312,917 12	1,115,133 10	581,298 00	711,596 58
American	Newark	300,000 00	5,002,148 15	2,236,272 60	2,173,644 83	1,595,029 05	789,662 39	2,165,875 55
American	Boston	600,000 00	923,253 49	3,817,728 48	550,098 11	478,554 83	251,743 00	126,599 86
American Central	St. Louis	1,000,000 00	3,817,728 48	1,568,130 62	2,010,649 24	1,632,728 13	864,450 50	1,249,597 86
American Fire	Philadelphia	500,000 00	2,865,504 41	2,011,478 63	1,791,960 07	1,442,593 11	777,289 34	354,025 78
Assurance Co. of America*	New York	400,000 00	1,186,089 94	535,278 25	883,817 32	755,343 65	456,362 49	230,821 69
Caledonian-American	New York	200,000 00	302,123 90	16,105 82	21,387 73	20,288 26	4,587 84	86,018 07
Citizens	St. Louis	200,000 00	761,533 15	377,986 12	486,083 05	398,220 70	237,192 29	183,547 03
Commercial Union Fire	New York	200,000 00	436,490 24	154,480 90	198,209 03	164,209 02	86,877 43	82,009 34
Concordia Fire	Milwaukee	200,000 00	1,016,575 37	681,725 12	636,318 24	659,389 43	348,883 14	134,850 25
Connecticut Fire	Hartford	1,000,000 00	5,172,036 80	2,730,551 45	3,181,086 90	2,587,368 55	1,429,292 26	1,441,485 35
Continental	New York	1,000,000 00	14,192,177 63	6,628,749 10	6,291,805 23	5,121,991 14	2,723,205 76	6,563,428 53
Delaware	Philadelphia	702,875 00	1,775,209 59	943,404 30	945,426 28	794,829 63	422,062 00	158,930 29
Dutchess	Poughkeepsie.	200,000 00	801,915 94	498,160 99	585,596 00	482,086 13	290,389 99	108,754 95
Equitable Fire and Marine	Providence, R. I.	400,000 00	1,250,434 22	684,560 73	907,387 83	791,039 06	433,734 61	165,773 49
Fire Association	Philadelphia	500,000 00	6,532,403 74	4,910,600 81	3,968,959 15	3,453,947 37	1,826,136 00	921,802 93
Firemen's	Baltimore	400,000 00	1,260,356 11	596,015 81	658,284 19	691,307 68	352,648 39	264,340 30
Franklin Fire	Philadelphia	400,000 00	3,141,594 44	1,696,508 86	3,039,079 06	755,937 47	354,068 35	1,045,085 58
German	Freeport, Ill.	200,000 00	5,006,681 60	3,303,085 99	3,072,602 14	2,515,596 89	1,311,114 84	1,503,595 61
German Alliance	New York	400,000 00	1,304,298 58	402,822 12	481,453 92	375,871 23	213,131 15	501,406 46
German-American	New York	1,500,000 00	12,228,528 64	5,095,279 05	6,731,568 27	4,482,455 84	2,384,399 18	5,633,249 59
German Fire	Peoria, Ill.	200,000 00	701,294 47	298,007 28	336,593 55	276,830 16	126,373 09	203,287 19
Germania Fire	New York	1,000,000 00	4,046,631 66	1,370,804 07	2,442,326 88	1,710,138 80	826,147 79	2,518,464 11
Glens Falls	Glens Falls, N.Y.	200,000 00	4,046,631 66	1,370,804 07	2,442,326 88	1,710,138 80	826,147 79	2,518,464 11
Globe and Rutgers Fire	New York	400,000 00	1,960,531 45	1,222,238 60	1,550,477 90	1,205,652 17	548,815 11	2,475,877 09
Greenwich	New York	200,000 00	2,120,003 97	1,761,810 20	2,004,129 11	1,905,346 75	1,126,917 36	630,227 49
Hanover Fire	New York	1,000,000 00	4,104,110 07	2,473,882 58	3,057,735 57	2,469,387 02	1,318,815 40	2,475,877 09
Hartford Fire	Hartford	1,250,000 00	14,544,952 28	9,355,155 41	10,523,326 69	9,129,498 52	5,195,145 45	3,939,796 87
Home	New York	3,000,000 00	18,040,793 99	8,466,042 50	8,843,886 28	7,082,325 04	4,167,185 66	6,574,751 49
Indemnity Fire	New York	200,000 00	450,161 52	196,291 38	288,191 02	253,532 32	147,517 61	53,870 14
Insurance Co. of N. America.	Philadelphia	3,000,000 00	11,259,981 65	5,837,991 32	7,257,713 46	6,559,161 96	3,818,424 77	2,421,990 33
Kings County Fire	New York	200,000 00	388,882 36	113,602 84	194,363 03	188,765 46	98,415 00	75,279 52
Mercantile Fire and Marine	Boston	400,000 00	733,987 88	216,568 01	196,606 66	329,506 48	221,819 96	117,419 87

REPORT OF THE INSURANCE COMMISSIONER.

Michigan Fire and Marine.....	400,000 00	927,278 55	347,469 72	456,292 61	398,599 18	210,518 10	179,808 83
Milwaukee Mechanics.....	200,000 00	2,926,281 42	1,339,072 30	1,445,819 98	1,237,866 89	578,306 19	1,387,209 12
National Fire.....	1,000,000 00	6,634,304 06	3,621,063 83	4,231,947 04	3,621,739 50	2,063,962 93	1,842,640 23
Pittsburg.....	750,000 00	1,634,357 80	559,082 13	782,697 51	584,693 24	270,554 14	325,275 67
National Union Fire.....	1,000,000 00	3,951,397 11	1,757,851 03	1,844,006 65	1,580,629 69	921,712 12	1,193,546 08
New Hampshire Fire.....	200,000 00	1,111,299 95	231,196 60	332,895 14	284,529 62	136,627 03	80,103 35
New York.....	500,000 00	3,859,761 96	2,153,200 29	2,623,137 50	2,298,852 53	1,171,700 27	1,208,561 67
Niagara Fire.....	200,000 00	417,078 30	188,832 11	333,386 71	284,729 37	165,248 75	28,246 19
North German Fire.....	600,000 00	3,558,677 55	1,858,867 34	1,514,706 15	1,213,814 59	498,148 34	1,069,810 21
Northwestern National.....	200,000 00	2,247,970 65	1,044,859 17	1,136,899 20	938,378 36	537,928 09	703,111 48
Orient.....	200,000 00	483,339 70	204,642 64	282,330 56	262,975 90	143,704 03	78,687 06
Pelican.....	200,000 00	6,261,613 51	3,342,171 20	2,860,487 02	2,327,739 68	1,331,678 37	2,519,442 31
Pennsylvania Fire.....	1,000,000 00	7,663,394 46	4,993,194 31	5,335,418 24	4,719,743 92	2,694,329 41	1,670,200 15
Phoenix.....	2,000,000 00	6,853,661 29	3,272,644 76	3,806,711 61	3,224,065 31	1,673,534 94	1,581,016 53
Providence-Washington.....	500,000 00	2,392,458 39	1,442,366 10	2,001,125 45	1,401,590 84	1,082,152 66	1,450,092 29
Queen.....	500,000 00	6,322,935 29	2,819,226 88	3,270,371 32	2,688,809 07	1,547,866 82	3,003,708 41
Rochester German.....	200,000 00	1,605,688 71	833,094 04	1,086,991 78	902,715 34	422,536 38	572,594 67
Springfield Fire and Marine.....	2,000,000 00	6,409,450 59	2,788,960 65	3,416,417 79	2,938,792 94	1,551,200 84	1,620,489 94
Spring Garden.....	400,000 00	1,543,321 21	98,454 44	748,269 27	610,993 62	289,898 61	153,866 77
St. Paul Fire and Marine.....	500,000 00	3,699,022 71	2,261,885 16	3,148,864 67	2,772,286 59	1,608,290 75	937,437 55
Teutonia.....	250,000 00	790,100 10	435,043 76	683,239 08	604,172 46	365,973 31	105,056 34
Traders.....	500,000 00	2,774,695 91	1,197,895 48	1,510,874 23	1,272,948 23	686,537 18	1,076,800 43
Union.....	200,000 00	546,907 61	316,674 20	363,637 16	372,778 06	205,105 09	30,233 41
United Firemen's.....	300,000 00	1,758,757 84	1,257,906 04	486,585 22	440,524 09	223,493 09	200,851 80
Philadelphia.....	200,000 00	346,610 75	95,925 37	160,029 19	120,354 50	97,108 97	50,685 38
Victoria Fire.....	300,000 00	3,447,004 01	1,898,380 79	2,139,613 37	1,816,988 60	974,820 50	1,248,623 22
Westchester Fire.....	200,000 00	697,439 85	429,316 02	439,142 72	371,075 11	205,854 20	68,123 83
Western Underwriters' Ass'n, Inc.....	200,000 00	2,462,573 54	982,056 67	1,157,478 72	1,076,992 98	510,699 05	1,230,516 87
Williamsburg City Fire.....	250,000 00						
Totals.....	\$41,102,875 00	\$233,365,055 03	\$118,521,657 52	\$139,397,425 70	\$108,457,083 73	\$59,341,792 28	\$73,770,522 51

*The National Standard Insurance Company was merged with the Assurance Company of America on December 31, 1903.

TABLE No. 28.
Showing the various items composing the Assets of Fire and Marine Insurance Companies doing business in California on December 31,
1903—Companies of other States.

Name.	Location.	Real Estate.	Loans on Bonds and Mortgages.	Stocks and Bonds owned by the Company.	Collateral Loans.	Cash in Office and in Banks.
<i>Etna</i>	Hartford	\$180,000 00	\$12,600 00	\$13,133,022 97		\$1,207,068 62
Agricultural	Watertown, N. Y.	306,275 00	573,288 73	941,514 75	\$443,211 64	139,289 77
American	Newark	447,000 00	1,555,982 91	2,379,060 00		249,600 27
American	Boston		32,000 00	714,654 50		27,174 11
American Central	St. Louis		9,500 00	2,969,615 00	421,500 00	178,645 04
Assurance Co. of America	Philadelphia	398,080 21	761,212 40	1,187,674 96	150,210 00	105,440 21
Caledonian-American	New York			1,026,675 00		91,858 94
Citizens	New York			286,875 00		2,480 45
Commercial Union Fire	St. Louis	4,877 60	241,070 00	253,140 00		91,215 65
Concordia Fire	New York			374,130 50		5,549 42
Connecticut Fire	Milwaukee	17,000 00	452,330 00	328,352 05		59,993 80
Continental	Hartford	192,300 00	1,333,250 00	3,107,619 00		304,708 16
Delaware	New York	1,113,000 00	32,150 00	11,288,515 00		808,503 53
Dutchess	Philadelphia	200,000 00	149,700 00	960,771 68	235,000 00	44,101 89
Equitable Fire and Marine	Poughkeepsie	27,500 00	18,700 00	579,910 00	1,500 00	98,945 44
Fire Association	Providence, R. I.	120,000 00	176,550 00	650,485 00	138,000 00	29,896 82
Firemen's	Philadelphia	440,327 50	1,331,656 99	3,463,554 00	269,975 00	275,328 14
Franklin Fire	Baltimore	145,000 00		892,650 00		57,637 62
German	Philadelphia	234,200 00	90,898 00	2,582,245 00	30,000 00	79,430 87
German Alliance	Freeport, Ill.	88,700 00	2,499,258 48	1,624,439 16	7,700 00	310,075 69
German-American	New York			1,166,484 00		28,432 28
German Fire	New York	15,000 00	13,000 00	10,797,194 00	71,088 99	99,657 37
Germania Fire	Peoria, Ill.	7,000 00	276,656 19	180,295 00		346,279 42
Glens Falls	New York	670,488 77	376,500 00	4,116,472 25		630,443 06
Globe and Rutgers Fire	Glens Falls, N. Y.	71,227 48	810,129 08	2,391,940 00	3,700 00	60,250 29
Greenwich	New York	73,000 00	54,500 00	1,295,842 00		127,397 89
Hanover Fire	New York			1,619,410 00		221,791 24
Hartford Fire	New York	692,985 84	3,500 00	2,750,244 75		1,173,763 90
Home	Hartford	940,500 00	734,369 00	10,183,874 85	4,800 00	38,207 98
Indemnity Fire	New York	1,310,639 48	91,200 00	14,460,262 58		1,083,395 18
Insurance Co. of North America	New York	602,180 00	966,038 04	385,965 00	704,655 00	6,656 85
Kings County Fire	Philadelphia			6,927,301 60		52,233 59
Mercantile Fire and Marine	New York	67,500 00	195,600 00	411,512 00	12,000 00	41,942 12
Michigan Fire and Marine	Boston			78,483 50		
	Detroit	99,831 40	630,807 00			

Milwaukee Mechanics	48,000 00	1,256,008 39	1,297,438 75	107,234 54
National Fire	354,855 22	617,715 00	4,783,228 00	336,779 80
National Union Fire	4,000 00	291,822 00	1,101,130 00	88,648 23
New Hampshire Fire	165,781 62	457,200 00	2,766,682 50	212,047 17
New York Fire	120,000 00		317,880 00	18,367 94
Niagara Fire		344,000 00	2,893,640 00	272,932 03
North German Fire		34,000 00	258,985 00	57,993 28
Northwestern National	52,632 55	1,003,000 00	2,172,870 00	150,981 71
Orient	65,333 84	41,158 00	1,782,817 38	136,703 99
Pelican			437,608 55	16,296 35
Pennsylvania Fire	210,000 00	746,599 99	4,055,251 00	635,100 00
Phoenix	576,000 00	52,100 00	5,153,423 00	783,499 24
Phoenix	339,575 82	102,449 25	5,129,697 00	419,537 10
Providence-Washington			2,016,860 00	106,575 52
Queen	150,999 25	71,000 00	5,299,534 28	195,582 44
Rochester German	267,810 91	353,347 10	643,525 00	202,912 68
Springfield Fire and Marine	227,000 00	554,500 00	4,536,144 00	333,562 28
Spring Garden	198,600 00	43,425 00	1,141,245 00	33,414 62
St. Paul Fire and Marine	387,306 44	551,622 15	2,207,795 25	255,131 66
Teutonia	40,000 00		621,835 00	41,282 25
Traders	31,993 84	213,300 00	2,081,827 40	231,768 32
Union	160,000 00		317,382 50	21,373 20
United Firemen's	202,034 00	354,861 00	898,678 00	57,731 61
Victoria Fire			332,348 00	4,653 84
Westchester Fire	253,000 00	363,650 00	2,412,100 00	102,560 25
Western Underwriters' Ass'n (Inc.)	1,500 00	367,825 37	129,457 50	93,676 05
Williamsburg City Fire	672,929 76	253,200 00	1,217,516 00	99,251 89
Totals	\$12,994,065 93	\$21,475,230 07	\$161,751,384 21	\$13,640,524 83

TABLE No 28—CONTINUED.

Name.	Location.	Interest Due and accrued.	Premiums in Course of Collection.	Bills Receivable, Not Matured, Taken for Fire, Marine and Inland Risks.	All other Assets.	Total Assets.
Ætna	Hartford	\$630 16	\$657,566 40			\$15,190,888 15
Agricultural	Watertown, N. Y.	29,866 14	234,098 89		\$1,010 29	2,688,555 21
American	Newark	57,073 25	179,763 01	\$133,133 31	475 40	5,002,148 15
American	Boston	6,059 22	143,365 66			3,817,728 48
American Central	St. Louis		238,468 44			2,865,504 41
American Fire	Philadelphia		228,839 56		22,240 50	1,186,099 94
Assurance Company of America.	New York	11,806 57	62,811 46			302,123 90
Caledonian-American	New York	4,754 54	10,411 66		10 96	761,533 15
Caledonian-American	St. Louis	2,345 83	16,514 50			436,490 24
Citizens	St. Louis	5,716 00	165,514 50			1,016,575 37
Commercial Union Fire	New York	1,113 75	55,696 57			5,172,036 80
Concordia Fire	Milwaukee	10,416 17	141,313 52		1,686 67	14,192,177 63
Connecticut Fire	Hartford		94,831 46	5,298 18	970 00	1,775,209 59
Continental	New York	83,744 57	770,039 28	94,538 58	729 33	801,915 94
Delaware	Philadelphia	15,257 41	169,408 61		770 00	1,250,434 22
Dutchess	Providence, R. I.	3,106 21	71,524 96	927 20	6,043 63	6,332,403 74
Equitable Fire and Marine	Philadelphia		493,325 84		11,192 89	1,200,356 11
Fire Association	Philadelphia		139,050 10			3,111,594 44
Firemen's	Baltimore	52,192 64	105,615 30	41,775 41		5,006,681 60
Franklin Fire	Philadelphia	14,825 60	123,457 10			1,304,228 58
German	Freeport, Ill.	1,363 47	453,741 74			12,228,528 64
German Alliance	New York	80,991 12	919,365 03		701,294 47	701,294 47
German-American	New York	3,697 00	919,365 03		24,574 12	5,819,833 63
German Fire	New York	53,348 84	105,615 30			4,046,681 16
Germania Fire	Peoria, Ill.	12,875 00	53,721 92			1,960,531 45
Glens Falls	New York	8,163 11	307,355 96			2,120,003 97
Globe and Rutgers Fire	Glens Falls, N. Y.	10,821 62	127,479 92	900 00		14,104,110 07
Greenwich	New York	8,388 63	468,550 53			14,542,952 28
Hanover Fire	New York	11,625 00	92,391 15			18,040,793 99
Hartford Fire	New York	20,400 32	400,836 75			450,161 52
Home	Hartford	9,821 95	2,145,300 00			11,259,981 65
Indemnity Fire	New York	1,971 50	563,933 05	7,930 56		388,882 36
Insurance Company of North America	New York	2,575 00	22,781 43			733,987 88
Kings County Fire	Philadelphia	6,752 33	930,361 61	520 13		927,278 55
Mercantile Fire and Marine	New York	1,308 33	5,739 02			2,926,281 42
Michigan Fire and Marine	Boston	1,308 33	5,739 02			
Milwaukee Mechanics	Detroit	13,304 83	61,990 73			
	Milwaukee	31,297 47	186,302 27			

National Fire.....		Hartford.....		371,726 04		6,484,304 06	
National Union Fire.....		Pittsburg.....	4,779 11	92,897 88	1,080 58	1,634,357 80	
New Hampshire Fire.....		Manchester.....	13,239 00	245,168 05	11,278 77	3,951,397 11	
New York Fire.....		New York.....	12,200 16	55,052 01		511,299 95	
Niagara Fire.....		New York.....	3,242 17	336,989 77		3,859,761 96	
North German Fire.....		New York.....	16,310 11	62,857 85		417,078 30	
Northwestern National.....		Milwaukee.....	30,392 87	162,883 18		3,558,677 55	
Orient.....		Hartford.....	40,195 95	190,574 35	123 75	2,247,970 65	
Pelican.....		New York.....	9,487 47	25,400 12	867 27	483,329 70	
Pennsylvania Fire.....		Philadelphia.....	5,566 63	390,228 99	2 73	6,261,613 51	
Phoenix.....		Brooklyn.....	50,900 74	986,200 93		7,663,394 46	
Providence-Washington.....		Hartford.....	10,112 11	724,816 08		6,853,661 29	
Queen.....		Providence, R. I.....	70,444 39	223,631 69	34,504 07	2,392,458 39	
Rochester German.....		New York.....	15,477 13	533,318 59		6,322,935 29	
Springfield Fire and Marine.....		Rochester, N. Y.....	47,607 50	122,615 89		1,605,688 71	
Spring Garden.....		Springfield, Mass.....	764 65	635,242 22		6,403,450 59	
St. Paul Fire and Marine.....		Philadelphia.....		125,636 85		1,543,321 21	
Teutonia.....		St. Paul.....		265,281 36	17,136 95	3,699,022 71	
Traders.....		New Orleans.....	11,502 74	86,982 85		740,100 10	
Union.....		Chicago.....		175,925 79		2,774,695 91	
United Firemen's.....		Philadelphia.....	9,816 61	32,241 92	28,377 82	546,907 61	
Victoria Fire.....		Philadelphia.....	3,108 87	46,274 53	3,409 99	1,758,757 84	
Westchester Fire.....		New York.....	15,094 52	6,500 01	4,562 09	346,610 75	
Western Underwriters' Ass'n, (Inc.).....		New York.....	8,524 38	300,599 24		3,447,004 01	
Williamsburg City Fire.....		Chicago.....	8,651 06	87,456 55		697,439 85	
		Brooklyn.....		168,284 29	6,740 54	2,462,573 54	
Totals.....			\$935,008 31	\$17,471,137 36	\$372,417 11	\$1,058,081 44	\$233,393,055 03

TABLE No. 29.

Showing the various items composing the Liabilities, except Capital Stock, of Fire and Marine Insurance Companies doing business in California on December 31, 1903—Companies of Other States.

Name.	Location.	Losses Adjusted.	Losses Unadjusted.	Losses Resisted.	Fire Reinsurance.	Marine Reinsurance.	All Other Claims.	Total Liabilities.	Net Surplus.
Etna	Hartford	\$123,918 35	\$446,730 89	\$25,839 00	\$4,107,883 56	\$180,340 99	\$325,608 15	\$5,220,320 94	\$5,970,567 21
Agricultural	Watertown	26,969 59	59,541 50	15,632 00	1,297,632 56	---	57,182 98	1,456,936 63	711,596 58
American	Newark	10,177 54	141,998 51	5,500 00	2,068,241 09	---	10,355 46	2,236,272 60	2,165,875 55
American	Boston	7,924 47	44,688 67	---	368,927 27	---	67,113 52	496,653 93	126,599 56
American Central	St. Louis	32,934 79	117,782 80	11,198 15	1,370,444 62	---	35,770 26	1,568,130 62	1,249,597 86
American Fire	Philadelphia	52,263 22	198,138 91	16,283 39	1,241,074 03	---	603,719 08	2,011,478 63	354,025 78
Assurance Company of America	New York	---	70,509 00	3,710 00	443,602 78	---	17,456 47	535,278 25	250,821 69
Caledonian-American	New York	---	824 30	---	9,440 64	---	5,840 89	16,105 83	86,018 07
Citizens	St. Louis	16,310 03	16,272 96	9,469 27	306,822 92	---	29,110 94	377,986 12	183,547 03
Commerce Union Fire	New York	7,026 00	6,054 00	3,850 00	119,752 68	---	17,798 22	154,480 90	82,009 34
Concordia Fire	Milwaukee	29,736 03	14,085 66	8,600 00	583,404 46	---	45,898 97	681,725 12	134,850 25
Connecticut Fire	Hartford	57,807 36	160,167 00	27,658 60	---	---	2,484,918 49	2,730,551 45	1,141,485 35
Continental	New York	---	417,192 23	47,701 00	5,646,414 36	---	517,441 51	6,628,749 10	6,563,428 53
Delaware	Philadelphia	500 00	68,160 00	3,890 00	694,517 46	---	146,336 84	913,404 30	158,930 29
Dutchess	Poughkeepsie	7,237 64	39,465 11	2,950 00	418,588 13	---	29,920 11	498,160 99	103,754 95
Equitable Fire and Marine	Providence, R.I.	3,951 00	60,310 00	7,029 00	578,135 64	8,248 83	26,986 26	684,660 73	165,773 49
Fire Association	Philadelphia	140,982 70	158,764 97	39,933 09	2,720,392 62	---	1,850,527 43	4,910,600 81	921,802 93
Firemen's	Baltimore	7,699 09	32,700 28	---	425,820 37	---	138,796 07	596,015 81	264,340 30
Franklin Fire	Philadelphia	21,008 73	42,518 80	1,946 00	651,520 48	---	979,514 80	1,696,508 86	1,045,085 58
German	Freeport, Ill.	75,026 06	89,239 55	12,497 92	2,987,135 90	---	139,186 56	3,303,085 99	1,503,595 61
German Alliance	New York	29,961 70	41,252 00	---	300,386 73	---	31,221 69	402,822 12	501,406 46
German American	New York	134,321 00	415,092 25	49,047 00	4,102,110 22	---	394,708 58	5,095,279 03	5,633,249 59
German Fire	Peoria, Ill.	7,995 00	10,000 00	---	280,112 28	---	---	298,007 28	203,287 19
Germania Fire	New York	68,851 17	59,316 72	19,894 00	2,178,043 74	---	5,263 89	2,231,369 52	2,518,464 11
Glens Falls	Glens Falls, N.Y.	25,793 26	27,969 78	2,025 00	1,280,016 03	---	35,000 00	1,370,804 07	2,475,877 09
Globe and Rutgers Fire	New York	35,341 50	84,287 18	7,816 32	974,311 03	---	120,482 57	1,222,238 60	338,292 85
Greenwich	New York	---	201,410 77	18,900 00	1,389,198 48	---	94,967 04	1,761,840 20	158,163 77
Hanover Fire	New York	78,849 89	199,211 27	32,238 48	2,073,259 38	57,363 91	90,590 71	2,473,882 58	630,227 49
Hartford Fire	Hartford	297,264 83	572,005 60	85,552 39	8,053,542 59	272 85	346,790 00	9,355,155 41	3,937,796 87
Home	New York	263,598 80	662,653 48	52,819 37	6,411,732 00	175,881 00	899,357 85	8,466,042 50	6,574,751 49
Indemnity Fire	New York	15,155 69	6,060 52	1,125 00	166,692 75	---	7,257 42	196,291 38	53,870 14
Insurance Co. of North America	Philadelphia	130,511 37	520,600 21	46,888 42	3,942,488 98	364,472 00	833,030 34	5,837,991 32	2,421,990 33

REPORT OF THE INSURANCE COMMISSIONER.

45

	4,180 79	11,781 50	97,640 55	113,602 84	75,279 52
Kings County Fire...					
Mercantile Fire and Marine					
Michigan Fire and Marine					
Milwaukee Mechanics					
National Fire					
National Union Fire					
New Hampshire Fire					
New York Fire					
Niagara Fire					
New York					
North German Fire					
Northwestern Nation'l					
Orient					
Pelican					
Pennsylvania Fire					
Phoenix					
Providence - Washing-					
ton					
Queen					
Rochester German					
Springfield Fire and Marine					
Spring Garden					
St. Paul Fire and Marine					
Teutonia					
Traders					
Union					
United Firemen's					
Victoria Fire					
Western Underwriters Association, (Inc.)					
Westchester Fire					
Williamsburg City Fire					
Totals					

TABLE NO. 30.

Showing the various items composing the Incomes of Fire and Fire and Marine Insurance Companies doing business in California on December 31, 1903—Companies of other States.

Name.	Location.	Fire Premiums.	Marine Premiums.	Interest On Mortgage Loans.	Interest and Dividends From Other Sources.	Rents.	From All Other Sources.	Total Income.
Ætna.....	Hartford.....	\$5,103,630 81	\$328,238 08	\$836 00	\$585,010 32	\$992 17	\$6,743 73	\$6,031,251 11
Agricultural	Watertown, N. Y.	1,210,543 48	-----	29,830 17	68,231 06	4,312 41	-----	1,312,917 12
American	Newark.....	1,816,315 36	-----	79,624 39	84,781 35	11,692 06	181,231 67	2,173,614 83
American	Boston.....	521,034 00	-----	550 00	26,324 11	-----	2,170 00	550,098 11
American Central.....	St. Louis.....	1,861,219 67	-----	3,191 73	146,237 84	-----	-----	2,010,649 24
American Fire.....	Philadelphia.....	1,677,298 91	-----	38,811 24	54,258 55	9,900 84	11,690 53	1,791,960 07
Assurance Co. of America.....	New York.....	845,562 90	-----	-----	38,254 42	-----	-----	883,817 32
Caledonian-American.....	New York.....	11,687 73	-----	-----	9,700 00	-----	-----	21,387 73
Citizens.....	St. Louis.....	414,750 50	168 41	10,774 14	60,390 00	-----	-----	486,083 05
Commercial Union Fire.....	New York.....	187,702 95	-----	10,516 08	10,516 08	-----	-----	198,209 03
Concordia Fire.....	Milwaukee.....	617,559 06	-----	21,227 36	16,026 92	1,404 90	-----	686,318 24
Connecticut Fire.....	Hartford.....	2,840,413 10	-----	64,792 55	124,458 98	4,177 68	7,244 59	3,081,086 90
Continental.....	New York.....	5,820,799 23	-----	1,574 28	445,814 28	23,617 44	-----	6,291,805 23
Delaware.....	Philadelphia.....	877,771 91	-----	5,285 75	50,695 38	8,774 23	2,899 01	945,426 28
Dutchess.....	Poughkeepsie.....	540,882 94	-----	949 05	22,717 76	1,046 25	-----	565,596 00
Equitable Fire and Marine.....	Providence, R. I.	838,066 90	-----	7,701 04	31,433 08	5,163 75	1,381 33	907,387 83
Fire Association.....	Philadelphia.....	3,649,357 46	23,611 73	72,658 54	188,174 51	3,770 53	52,998 11	3,906,959 15
Firemen's.....	Baltimore.....	616,989 29	-----	-----	28,277 99	6,675 43	6,346 48	637,284 19
Franklin Fire.....	Philadelphia.....	713,977 63	-----	5,881 10	113,086 69	6,133 64	-----	839,079 06
German.....	Freeport, Ill.....	2,907,350 68	-----	103,320 25	57,987 07	3,944 14	-----	3,072,602 14
German Alliance.....	New York.....	427,217 41	-----	-----	54,218 56	-----	-----	481,435 97
German-American.....	New York.....	4,914,874 53	-----	520 00	400,806 87	1,686 82	1,413,680 00	6,731,568 22
German Fire.....	Peoria, Ill.....	371,885 76	-----	18,072 01	6,166 00	469 78	-----	396,593 55
Germania Fire.....	New York.....	2,101,800 81	-----	16,546 80	179,787 23	9,762 99	-----	2,297,934 84
Glens Falls.....	Glens Falls, N. Y.	1,281,568 33	-----	53,661 92	117,333 64	9,762 99	-----	1,442,326 88
Globe and Rutgers Fire.....	New York.....	1,502,284 33	-----	2,715 00	40,001 07	5,290 50	187 00	1,550,477 90
Greenwich.....	New York.....	1,744,455 33	195,200 23	-----	64,473 55	-----	-----	2,004,129 11
Hanover Fire.....	New York.....	2,906,137 64	-----	175 00	112,339 79	29,083 14	-----	3,057,735 57
Hartford Fire.....	Hartford.....	10,073,790 71	-----	37,272 95	38,045 63	18,755 14	13,082 26	10,523,326 69
H-me.....	New York.....	7,813,758 91	262,361 10	6,159 29	534,489 94	168,400 33	58,716 71	8,843,886 28
Indemnity Fire.....	New York.....	275,824 22	-----	-----	12,366 80	-----	-----	288,191 02
Insurance Co. of N. America.....	Philadelphia.....	5,018,112 26	1,819,199 63	55,733 82	316,020 50	37,973 09	10,674 16	7,257,713 46
Kings County Fire.....	New York.....	17,814 95	-----	7,294 02	12,640 41	3,887 67	-----	194,363 03
Mercantile Fire and Marine.....	Boston.....	166,675 91	-----	-----	21,744 00	892 73	-----	196,606 66
Michigan Fire and Marine.....	Detroit.....	412,768 68	-----	31,468 39	4,676 62	3,108 00	4,270 92	456,292 61

Milwaukee Mechanics	1,333,936 53	---	53,883 10	51,641 42	6,358 93	---	1,445,819 98
National Fire	3,979,101 45	---	25,625 16	20,247 22	18,273 21	---	4,231,247 04
National Union Fire	713,158 01	---	15,604 60	50,976 73	548 75	2,409 42	782,697 51
New Hampshire Fire	1,684,804 76	---	26,319 72	---	19,188 99	89 32	1,844,006 65
New York Fire	316,574 69	---	---	14,545 49	1,774 96	---	332,895 14
Niagara Fire	2,488,528 19	---	14,198 37	116,407 26	---	3,903 64	2,623,037 50
North German Fire	304,573 54	---	---	8,813 17	---	20,000 00	333,386 71
Northwestern National	1,379,771 92	---	41,247 74	90,202 66	---	3,483 83	1,514,706 15
Orient	1,071,781 16	---	2,562 42	60,306 41	2,249 21	---	1,136,894 20
Pelican	269,586 02	---	---	12,714 54	---	---	282,330 56
Pennsylvania Fire	2,609,923 20	---	34,211 34	201,376 16	13,273 78	1,702 54	2,860,487 02
Phoenix	5,093,981 80	---	3,451 25	194,953 91	38,031 78	---	5,335,418 21
Providence-Washington	3,551,867 23	---	5,048 75	214,478 72	16,418 65	18,898 26	3,806,711 61
Providence, R. I.	1,907,469 08	---	---	93,656 37	---	---	2,001,125 45
Queen	3,069,503 62	---	1,445 00	196,014 02	3,378 68	---	3,270,371 32
Rochester German	1,029,876 27	---	17,361 67	26,072 00	13,681 84	---	1,086,991 78
Springfield Fire and Marine	3,205,161 02	---	27,741 53	177,663 51	5,851 73	---	3,416,417 79
Spring Garden	676,447 20	---	2,201 06	45,905 50	12,620 80	10,092 71	748,267 27
St. Paul Fire and Marine	2,554,566 27	423,814 53	24,054 76	101,541 20	41,139 10	3,748 81	3,148,864 67
Teutonia	633,026 06	20,772 72	---	20,947 74	---	8,492 56	683,239 08
Traders	1,401,306 65	---	5,632 09	98,196 98	2,138 51	3,600 00	1,510,874 23
Union	348,568 75	---	4 72	14,124 40	2,108 43	830 86	365,637 16
United Firemen's	409,672 74	---	19,129 57	46,617 91	10,027 17	1,137 83	486,585 22
Victoria Fire	150,932 86	---	---	9,096 33	---	---	160,029 19
Westchester Fire	2,012,041 16	---	22,399 78	90,185 59	1,905 31	13,081 53	2,139,613 37
Western Underwriters' Ass'n (Inc.)	404,866 43	---	19,968 79	5,307 50	---	---	429,142 72
Williamsburg City Fire	1,055,264 10	---	12,585 92	53,847 98	35,780 72	---	1,157,478 72
Totals	\$115,953,994 50	\$3,073,396 43	\$1,054,204 13	\$6,739,401 58	\$615,661 21	\$1,864,767 85	\$129,301,425 70

TABLE No. 31.

Showing the various items composing the Expenditures of Fire and Marine Insurance Companies doing business in California on December 31, 1903—Companies of other States.

Name.	Location.	Fire Losses.	Marine Losses.	Dividends.	Commissions and Brokerage.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures.
Ætna	Hartford	\$2,480,142 52	\$205,415 02	\$670,000 00	\$913,470 42	\$337,886 62	\$125,520 81	\$432,712 83	\$5,165,148 22
Agricultural	Watertown, N.Y.	572,083 97		50,000 00	264,047 67	86,758 65	49,190 98	93,051 83	1,115,133 10
American	Newark	728,309 55		97,042 30	470,211 38	100,649 77	64,092 60	134,723 45	1,595,029 05
American	Boston	247,321 39		21,000 00	130,530 86	19,622 78	12,579 26	47,480 34	478,534 83
American Central	St. Louis	817,524 35		130,000 00	351,614 06	99,230 80	41,609 29	192,749 63	1,632,728 13
American Fire	Philadelphia	779,112 27		30,000 00	373,084 91	127,778 93	40,136 14	92,480 86	1,442,593 11
Assurance Company of America	New York	480,355 78	1,152 71		237,749 37	2,520 00	28,665 31	4,900 48	755,343 65
Caledonian-American	New York	6,685 56		9,000 00	2,877 31	945 52	237 86	542 01	20,288 26
Citizens'	St. Louis	227,204 86			84,443 94	34,563 37	15,710 81	36,298 22	398,220 70
Commercial Union Fire	New York	93,612 47		10,000 00	47,180 20	3,759 92	4,908 61	4,747 82	164,209 02
Concordia Fire	Milwaukee	354,249 21		12,000 00	180,483 48	33,140 00	28,856 80	50,639 94	659,389 43
Connecticut Fire	Hartford	1,414,629 77	1,414,629 77	100,000 00	587,800 24	202,827 64	94,528 79	187,882 11	2,587,368 55
Continental	New York	2,680,112 31		300,000 00	1,267,049 66	424,759 45	141,069 39	309,000 33	5,112,991 14
Delaware	Philadelphia	389,578 78		28,115 00	223,791 34	62,232 93	25,111 30	66,000 28	794,829 63
Dutchess	Poughkeepsie	277,038 32		12,000 00	144,713 66	21,926 18	12,088 22	14,329 75	482,096 13
Equitable Fire and Marine.	Providence, R. I.	431,238 14	15,311 47	28,000 00	186,132 11	50,273 07	27,250 72	52,833 55	791,039 06
Fire Association	Philadelphia	1,787,247 59		200,000 00	893,317 77	301,984 75	82,717 27	188,679 99	3,453,947 37
Firemen's	Baltimore	353,413 65		64,350 96	166,442 46	21,865 66	34,472 94	50,762 01	691,307 68
Franklin Fire	Philadelphia	350,555 00		80,000 00	171,522 79	35,085 50	21,649 75	96,524 43	753,937 47
German	Freeport, Ill.	1,286,019 74		40,000 00	784,828 59	168,467 58	70,716 74	195,564 24	2,515,596 89
German Alliance	New York	203,141 20		40,000 00	95,766 15	4,468 80	30,495 08		375,871 23
German-American	New York	2,299,121 51		500,000 00	899,180 23	224,623 07	128,547 14	430,983 89	4,482,465 84
German Fire	Peoria, Ill.	126,373 09		18,000 00	102,106 06	7,289 00	48 27	23,013 74	276,830 16
Germania Fire	New York	801,739 04		100,000 00	434,816 99	148,539 33	54,781 41	110,262 03	1,710,138 80
Glens Falls	Glens Falls, N.Y.	553,010 44		120,000 00	316,391 26	79,371 13	58,460 55	78,418 79	1,205,652 17
Globe and Rutgers Fire	New York	683,028 62	11 66	44,000 00	244,523 94	34,270 12		62,666 01	1,068,500 35
Greenwich	New York	982,139 55	122,460 16	20,000 00	395,274 42	168,657 63	53,959 89	162,855 10	1,905,346 75
Hanover Fire	New York	1,286,814 72		100,000 00	537,872 58	214,014 27	70,267 19	260,388 26	2,469,387 02
Hartford Fire	Hartford	5,068,124 03		437,500 00	1,821,175 69	699,589 66	301,990 17	801,118 97	9,129,495 52
Home	New York	3,590,428 23	190,791 36	420,000 00	1,496,914 33	484,480 20	20,536 17	879,144 75	7,029,325 04
Indemnity Fire	New York	148,413 08			56,752 82	22,118 97	8,133 52	18,113 93	253,532 32

Insurance Company	2,489,502 70	1,368,922 07	360,016 80	1,358,875 59	419,242 01	154,043 55	378,559 24	6,529,161 96
of North America	96,703 93	---	10,000 00	49,097 06	13,988 11	3,577 00	15,399 36	188,765 46
Kings County Fire	---	---	---	---	---	---	---	---
Mercantile Fire and Marine	218,866 41	---	32,000 00	31,068 20	18,257 78	10,984 91	18,329 18	329,506 48
Michigan Fire and Marine	206,832 57	---	24,000 00	92,469 99	15,305 66	17,971 61	42,019 35	398,599 18
Milwaukee Mechanics	589,397 97	---	80,000 00	322,676 34	95,976 07	49,976 26	99,840 25	1,237,866 89
National Fire	2,020,275 15	---	120,000 00	753,339 18	299,885 73	139,186 55	289,052 89	3,621,739 50
National Union Fire	268,857 12	---	100,000 00	162,430 22	44,030 51	31,911 73	77,433 66	584,693 24
New Hampshire Fire	843,564 77	---	100,000 00	405,811 58	76,073 27	52,480 67	102,699 33	1,580,629 62
New York Fire	140,214 73	3,408 68	12,000 00	72,161 79	28,771 50	8,004 16	19,968 83	284,329 69
Niagara Fire	1,139,710 46	---	99,930 00	512,628 87	183,578 83	---	332,954 37	2,268,852 53
New York	170,735 91	---	6,000 00	90,435 47	4,010 79	4,134 38	9,392 82	284,729 37
North German Fire	493,113 59	---	90,000 00	361,605 87	137,068 92	41,628 55	90,235 99	1,213,814 59
Northwest'n National	501,924 15	161 67	50,000 00	230,910 56	65,693 91	25,865 80	62,303 49	938,378 36
Orient	140,527 31	1,680 45	50,000 00	72,465 47	24,783 37	9,165 74	16,034 01	262,975 90
Pelican	1,292,737 94	---	100,000 00	522,038 69	171,000 00	87,356 43	154,606 62	2,327,739 68
Pennsylvania Fire	2,632,207 70	---	100,000 00	1,006,376 25	399,991 64	124,598 36	456,569 97	4,719,743 92
Phoenix	1,632,282 24	---	240,000 00	696,859 40	200,970 74	118,472 83	335,480 10	3,224,065 31
Providence-Washing-	---	---	---	---	---	---	---	---
ton	808,401 70	302,549 63	50,000 00	387,146 05	120,770 04	49,955 57	182,767 85	1,901,590 84
Queen	1,560,209 29	---	100,000 00	559,075 29	219,979 54	71,242 99	178,301 96	2,688,809 07
Rochester German	425,905 07	---	30,000 00	301,159 01	30,513 98	28,450 14	86,687 14	902,715 34
Springfield Fire and Marine	1,561,442 40	---	200,000 00	606,642 43	143,410 67	123,162 59	304,134 85	2,938,792 94
Spring Garden	269,520 22	4,805 59	24,000 00	176,662 30	37,456 69	21,575 30	76,973 52	610,993 62
St. Paul Fire and Marine	1,307,988 20	279,493 61	50,000 00	665,868 18	96,413 43	6,352 76	366,170 41	2,772,286 59
Teutonia	352,984 28	2,774 03	25,045 00	138,537 65	24,119 34	17,787 98	42,944 18	604,172 46
Traders	681,717 35	---	50,000 00	314,224 22	94,492 15	45,747 26	86,767 25	1,272,948 23
Union	206,360 81	---	10,000 00	74,289 25	38,237 60	12,337 32	31,553 08	372,778 06
United Firemen's	230,180 23	---	30,000 00	102,753 30	30,974 05	11,070 72	35,545 79	440,524 09
Victoria Fire	69,151 42	---	---	38,982 98	4,883 52	3,156 98	4,179 60	120,354 50
Westchester Fire	959,605 75	---	48,000 00	478,491 69	126,547 64	8,645 50	225,698 02	1,846,988 60
Western Underwriters	---	---	---	---	---	---	---	---
Association, Inc.	193,803 29	---	---	104,963 70	25,260 76	14,333 42	32,713 94	371,075 11
Williamsburg City Fire	501,818 67	---	75,198 00	268,817 47	86,757 65	44,737 78	57,663 41	1,036,992 98
Totals	\$55,507,342 07	\$3,913,567 88	\$5,857,248 06	\$24,810,960 74	\$7,504,777 20	\$2,986,247 50	\$2,291,570 03	\$108,448,083 93

TABLE NO. 32.

Showing amount of Risks Written, Premiums Received, and amount of Risks in Force on December 31, 1903, with Premiums thereon, of Fire and Fire and Marine Insurance Companies doing business in California—Companies of other States.

Name.	Location.	RISKS WRITTEN DURING THE YEAR.				
		Fire.	Premiums.	Marine.	Premiums.	Total Premiums.
Etna	Hartford.....	\$521,340,768 00	\$6,960,843 05	\$93,930,778 00	\$438,055 80	\$7,398,898 85
Agricultural	Watertown, N. Y.....	162,639,700 00	1,788,648 00	—	—	1,788,648 00
American	Newark	207,249,330 00	2,371,718 32	—	—	2,371,718 32
American	Boston	52,872,372 00	677,160 12	—	—	677,160 12
American Central	St. Louis	200,672,008 00	2,495,727 97	—	—	2,495,727 97
American Fire	Philadelphia	150,803,985 00	2,035,459 49	—	—	2,035,459 49
Assurance Company of America	New York	85,884,830 00	1,143,869 44	—	—	1,143,869 44
Caledonian-American	New York	7,288,910 00	89,271 86	—	—	89,271 86
Citizens	St. Louis	142,822,372 00	2,116,108 29	117,263 00	517 19	2,116,625 48
Commercial Union Fire	New York	28,182,048 00	330,029 83	—	—	330,029 83
Concordia Fire	Milwaukee	76,593,999 00	968,462 81	—	—	968,462 81
Connecticut Fire	Hartford	261,486,967 00	3,496,067 05	—	—	3,496,067 05
Continental	New York	661,320,652 00	6,818,332 69	—	—	6,818,332 69
Delaware	Philadelphia	89,979,249 00	1,128,027 67	—	—	1,128,027 67
Dutchess	Poughkeepsie	53,117,192 00	694,722 85	—	—	694,722 85
Equitable Fire and Marine	Providence, R. I.....	74,716,359 00	1,021,143 87	1,610,365 00	24,988 38	1,046,132 25
Fire Association	Philadelphia	363,903,124 00	4,878,485 59	—	—	4,878,485 59
Firemen's	Baltimore	76,221,619 00	965,238 22	—	—	965,238 22
Franklin Fire	Philadelphia	69,971,592 00	911,270 03	—	—	911,270 03
German	Freeport, Ill.	261,380,161 00	3,628,479 86	—	—	3,628,479 86
German Alliance	New York	50,621,325 00	541,357 66	—	—	541,357 66
German-American	New York	757,413,636 00	7,656,215 47	—	—	7,656,215 47
German Fire	Peoria, Ill.	32,556,476 00	435,906 60	—	—	435,906 60
Germania Fire	New York	280,378,508 00	2,717,652 91	—	—	2,717,652 91
Glens Falls	Glens Falls, N. Y.....	135,295,530 00	1,679,794 11	—	—	1,679,794 11
Globe and Rutgers Fire	New York	131,216,357 00	2,015,728 09	—	—	2,015,728 09
Greenwich	New York	268,977,346 00	2,457,234 67	51,023,296 00	211,705 01	2,668,939 68
Hanover Fire	New York	435,670,859 00	4,253,745 85	—	—	4,253,745 85
Hartford Fire	Hartford	907,545,827 00	12,435,278 48	—	—	12,435,278 48
Home	New York	1,169,755,221 00	11,911,865 48	61,705,910 00	540,467 76	12,452,333 24
Indemnity Fire	New York	29,473,788 00	403,628 36	—	—	403,628 36
Insurance Company of North America	Philadelphia	519,162,438 00	6,314,116 55	401,923,114 00	2,166,738 29	4,480,854 84

Kings County Fire	New York	22,504,578 00	215,088 87	215,088 87
Mercantile Fire and Marine	Boston	54,866,553 00	750,611 30	750,611 30
Michigan Fire and Marine	Detroit	42,730,225 00	573,588 20	573,588 20
Milwaukee Mechanics	Milwaukee	136,687,284 00	1,790,736 18	1,790,736 18
National Fire	Hartford	486,612,055 00	5,765,952 56	5,765,952 56
National Union Fire	Pittsburg	70,843,328 00	925,236 27	925,236 27
New Hampshire Fire	Manchester	155,467,466 00	2,040,403 38	2,040,403 38
New York Fire	New York	35,005,457 00	415,878 95	415,878 95
Niagara Fire	New York	277,322,911 00	3,353,567 58	3,353,567 58
North German Fire	New York	25,934,343 00	425,301 33	425,301 33
Northwestern National	New York	155,231,087 00	1,572,850 49	1,572,850 49
Orient	Milwaukee	117,171,515 00	1,518,784 21	1,518,784 21
Pelican	Hartford	34,924,573 00	403,909 07	403,909 07
Pennsylvania Fire	New York	284,426,290 00	3,526,264 30	3,526,264 30
Phoenix	Philadelphia	570,665,866 00	6,440,924 02	6,440,924 02
Phoenix	Brooklyn	484,465,649 00	4,680,580 74	4,680,580 74
Providence-Washington	Hartford	202,665,846 00	2,143,912 76	2,143,912 76
Queen	Providence, R. I.	110,629,240 00	1,477,409 28	1,477,409 28
Rochester German	New York	308,315,249 00	3,983,427 28	3,983,427 28
Springfield Fire and Marine	Rochester, N. Y.	110,629,240 00	1,477,409 28	1,477,409 28
Spring Garden	Springfield, Mass.	361,056,862 00	4,424,986 76	4,424,986 76
St. Paul Fire and Marine	Philadelphia	89,145,795 65	1,093,948 95	1,093,948 95
Teutonia	St. Paul	163,330,802 00	3,106,251 97	3,814,160 02
Traders	New Orleans	56,333,636 00	864,216 00	864,216 00
Union	Chicago	150,968,621 00	2,068,161 09	2,068,161 09
United Firemen's	Chicago	35,545,296 00	454,576 43	454,576 43
Victoria Fire	Philadelphia	43,089,787 00	516,957 71	516,957 71
Westchester Fire	Philadelphia	18,358,651 00	191,025 04	191,025 04
Western Underwriters' Association, Inc.	New York	240,946,830 00	2,667,517 84	2,667,517 84
Williamsburg City Fire	Chicago	43,265,653 00	579,244 54	579,244 54
	Brooklyn	126,164,904 00	1,351,764 01	1,351,764 01
Totals		\$13,171,160,845 65	\$156,664,868 35	\$4,748,536 69
			\$841,975,058 00	\$165,413,205 04

TABLE No. 32—CONTINUED.

Name.	Location.	RISKS IN FORCE DECEMBER 31, 1903.			
		Fire.	Premiums.	Marine.	Premiums.
					Total Premiums.
Ætna	Hartford	\$640,304,190 00	\$7,942,383 09	\$7,132,258 00	\$8,122,724 08
Agricultural	Watertown, N. Y.	251,372,200 00	2,527,434 00		2,527,434 00
American	Newark	348,041,034 00	3,750,442 14		3,750,442 14
American	Boston	58,896,100 00	712,035 58		712,035 58
American Central	St. Louis	219,981,750 00	2,590,922 68		2,590,922 68
American Fire	Philadelphia	187,556,259 00	2,330,690 26		2,330,690 26
Assurance Company of America.	New York	65,411,738 00	865,764 00		865,764 00
Caledonian-American.	New York	1,654,711 00	19,013 06		19,013 06
Concordia Fire	Milwaukee	102,904,163 00	1,150,223 05		1,150,223 05
Citizens	St. Louis	41,485,666 00	576,619 00		576,619 00
Commercial Union Fire.	New York	19,412,450 00	228,514 29		228,514 29
Connecticut Fire	Hartford	389,447,561 00	4,790,773 53		4,790,773 53
Continental	New York	1,035,395,861 00	10,848,337 92		10,848,337 92
Delaware	Philadelphia	118,511,706 00	1,354,611 46		1,354,611 46
Dutchess	Poughkeepsie	67,684,438 00	802,459 61		802,459 61
Equitable Fire and Marine.	Providence, R. I.	87,178,770 00	1,109,764 34	248,103 00	1,125,022 10
Fire Association	Philadelphia	439,475,590 00	5,338,571 94		5,338,571 94
Firemen's	Baltimore	85,542,311 00	835,345 01		835,345 01
Franklin Fire	Philadelphia	105,651,258 00	1,224,963 39		1,224,963 39
German	Freeport, Ill.	440,162,131 00	5,669,773 07		5,669,773 07
German Alliance	New York	59,148,601 00	594,148 94		594,148 94
German-American	New York	834,286,100 00	7,869,268 92		7,869,268 92
German Fire	Peoria, Ill.	39,199,545 00	508,207 63		508,207 63
Germania Fire	New York	454,487,040 00	4,162,053 77		4,162,053 77
Glens Falls	New York	220,025,094 00	2,419,818 01		2,419,818 01
Globe and Rutgers Fire.	Glens Falls, N. Y.	115,009,186 00	1,930,499 95		1,930,499 95
Greenwich	New York	302,212,598 00	2,699,188 50		2,699,188 50
Hanover Fire	New York	405,070,974 94	3,465,129 72		3,465,129 72
Hartford Fire	Hartford	1,295,543,832 00	15,918,124 55		15,918,124 55
Home	New York	1,192,419,716 00	12,403,441 00	11,270,812 00	12,699,822 00
Indemnity Fire	New York	25,028,352 00	320,499 52		320,499 52
Insurance Company of North America	Philadelphia	636,355,417 00	7,721,270 40		7,721,270 40
Kings County Fire	New York	18,709,572 00	189,466 69		189,466 69
Mercantile Fire and Marine.	Boston.	27,488,462 00	356,947 94	6,760,841 00	356,947 94

Michigan Fire and Marine	49,031,105 00	598,574 79	598,574 79
Milwaukee Mechanics	186,382,342 00	2,251,825 30	2,251,825 30
National Fire	570,485,468 00	6,227,772 30	6,227,772 30
National Union Fire	69,849,041 00	885,203 89	885,203 89
New Hampshire Fire	227,009,017 00	2,788,028 99	2,788,028 99
New York Fire	30,486,211 00	365,727 15	365,727 15
New York	339,711,278 00	3,726,036 11	3,726,036 11
Niagara Fire	21,299,448 00	341,409 06	341,409 06
North German Fire	309,027,266 00	3,023,777 03	3,023,777 03
Northwestern National	141,963,984 00	1,653,080 19	1,653,080 19
Orient	31,236,856 00	330,278 65	330,278 65
Pelican	393,576,991 00	4,378,343 49	4,378,343 49
Pennsylvania Fire	719,891,166 00	8,477,757 47	8,477,757 47
Phoenix	513,914,648 00	5,385,438 14	5,385,438 14
Providence-Washington	185,689,494 00	2,132,431 72	2,132,431 72
Queen	377,075,300 00	4,497,091 02	4,497,091 02
Rochester German	117,606,428 00	1,427,740 46	1,427,740 46
Springfield Fire and Marine	415,628,844 00	4,751,361 47	4,751,361 47
Spring Garden	100,590,183 97	1,088,761 59	1,088,761 59
St. Paul Fire and Marine	243,100,065 00	3,468,142 51	3,468,142 51
Teutonia	50,754,799 00	711,742 41	711,742 41
Traders	158,767,913 00	2,005,729 80	2,005,729 80
Union	42,549,024 00	495,687 84	495,687 84
United Firemen's	61,777,849 00	664,590 60	664,590 60
Victoria Fire	14,605,282 00	155,197 79	155,197 79
Westchester Fire	326,567,266 00	3,304,301 60	3,304,301 60
Western Underwriters' Association, Inc.	58,347,111 00	716,204 40	716,204 40
Williamsburg City Fire	172,354,774 00	1,697,322 80	1,697,322 80
Totals	\$16,253,937,530 91	\$39,338,796 00	\$1,357,934 61
			\$184,644,200 14

TABLE No. 33.—Summary of Assets, Liabilities, Incomes, Expenditures, etc., of Fire and Marine Insurance Companies doing business in California on December 31, 1903—Companies of Foreign Countries.

Name.	Location.	Cash Capital Paid Up.	Assets.	Liabilities, Capital not Included.	Incomes.
Aachen and Munich Fire	Aix-la-Chapelle, Germany	---	\$1,127,132 81	\$725,745 70	\$916,939 87
Alliance	London	---	898,601 14	275,818 13	424,314 25
Atlas*	London	\$720,000 00	13,166,511 72	10,813,223 17	2,776,310 48
Austrian Phoenix*	Vienna	1,200,000 00	2,196,931 94	686,511 68	1,380,389 28
British America	Toronto	---	1,491,863 68	1,038,790 20	1,560,010 46
Caledonian	Edinburgh	---	1,734,353 51	992,722 08	1,124,764 39
Commercial Union	London	---	4,294,751 91	2,910,551 38	3,130,870 51
Hamburg-Bremen Fire	Hamburg	---	1,834,177 95	1,397,485 25	1,756,001 90
Helvetia Swiss Fire	St. Gall, Switzerland	---	601,133 25	20,049 16	55,075 71
Law Union and Crown	London	---	854,201 88	271,515 28	561,473 16
London and Lancashire Fire	Liverpool	---	2,801,621 87	1,797,626 60	1,995,328 58
Liverpool and London and Globe	Liverpool	---	12,056,918 50	6,896,376 15	7,239,654 10
London	London	---	2,766,642 98	1,470,882 63	1,922,065 40
Manchester	Manchester	---	1,780,291 68	1,205,716 44	1,405,564 95
Netherlands Fire	The Hague	---	542,713 36	104,509 91	137,170 95
New Zealand	Auckland	---	517,086 05	160,250 28	229,311 65
North British and Mercantile*	London	3,437,500 00	21,274,510 24	6,192,903 33	9,777,287 75
Northern*	London	1,500,000 00	3,400,487 83	2,302,888 06	2,419,890 82
North German Fire*	Hamburg	375,000 00	954,756 25	509,362 17	506,189 08
Norwich Union Fire*	Norwich, England	660,000 00	7,684,886 29	3,672,838 37	6,139,609 92
Palatine	London	---	1,946,036 33	1,093,201 31	1,316,392 55
Phoenix	London	---	2,978,911 95	2,118,441 02	2,568,806 04
Prussian National	Stettin	---	1,047,689 00	639,286 60	674,067 90
Rhine and Moselle Fire*	Strasbourg	600,000 00	1,593,671 20	377,543 22	503,689 04
Royal	Liverpool	---	8,654,632 16	5,839,119 59	5,240,327 31
Royal Exchange*	London	---	2,108,188 00	1,086,555 26	1,479,970 32
Scottish Union and National	Edinburgh	---	4,840,110 16	2,053,002 75	2,072,717 77
State Fire	Liverpool	---	353,315 66	126,708 63	194,427 71
Sun	London	---	2,911,882 15	1,951,754 29	2,116,479 44
Svea Fire and Life*	Gothenburg, Sweden	---	9,362,683 78	7,696,388 48	3,033,340 10
Thuringia	Erfurt, Germany	533,333 33	1,273,489 36	925,643 37	1,203,627 22
Transatlantic Fire	Hamburg	---	642,970 85	283,177 80	358,381 35
Union	London	---	1,696,534 87	818,270 57	1,127,169 39
Upper Rhine*	Mannheim	250,000 00	1,112,303 76	735,500 09	1,006,270 04
Western	Toronto	---	2,457,488 89	1,672,680 09	2,673,414 70
Totals	---	\$9,276,833 33	\$124,959,492 96	\$70,363,039 04	\$71,187,704 09

*Home office statement.

TABLE No. 33—CONTINUED.

Name.	Location.	Expenditures	Losses Incurred During the Year.	Net Surplus.
Aachen and Munich Fire.	Aix-la-Chapelle, Germany.	\$826,508 27	\$469,016 79	\$401,387 11
Alliance	London	415,476 57	141,199 48	422,783 01
Atlas	London	2,377,811 99	1,353,832 85	1,633,288 55
Austrian Phoenix *	Vienna	1,370,344 22	980,062 77	310,429 26
British America	Toronto	1,371,372 62	871,000 01	453,073 48
Caledonian	Edinburgh	961,313 12	560,868 67	741,631 43
Commercial Union	London	2,658,513 05	1,662,921 88	1,384,200 53
Hamburg-Bremen Fire	Hamburg	1,486,768 58	850,253 92	436,692 70
Helvetia Swiss Fire	St. Gall, Switzerland	75,946 09	28,052 40	381,084 09
Law Union and Crown	London	375,717 22	174,144 60	382,686 60
Liverpool and London and Globe	Liverpool	5,592,939 76	3,603,888 19	5,160,542 35
London	London	1,525,056 37	878,893 23	785,960 35
London and Lancashire Fire	Liverpool	1,903,512 59	844,058 36	1,003,995 27
Manchester	Manchester	1,294,251 09	730,057 14	574,575 24
Netherlands Fire	The Hague	188,031 06	93,579 58	238,203 45
New Zealand	Auckland	226,094 89	152,478 00	356,885 77
North British and Mercantile *	London	8,838,698 49	4,686,343 25	11,644,106 91
Northern *	London	2,369,906 45	1,118,890 15	897,599 77
North German Fire *	Hamburg	489,548 22	266,610 98	70,394 08
Norwich Union Fire *	Norwich, England	5,338,460 33	3,249,181 07	3,352,057 92
Palatine	London	1,141,275 98	613,345 83	852,835 02
Phoenix	London	2,571,484 50	1,393,162 00	860,470 93
Prussian National	Stettin	570,350 14	325,955 86	408,402 40
Rhine and Moselle Fire *	Strasbourg	437,828 96	197,492 67	516,127 98
Royal	Liverpool	4,191,004 90	2,486,351 64	3,315,512 57
Royal Exchange *	London	1,116,991 27	1,026,785 38	1,021,632 74
Scottish Union and National	Edinburgh	1,683,871 97	944,506 81	2,587,107 41
State Fire	Liverpool	184,961 82	100,913 08	26,607 03
Sun.	London	1,844,622 77	1,039,540 11	960,127 86
Svea Fire and Life *	Gothenburg, Sweden	2,736,519 96	627,580 03	1,132,961 97
Thuringia	Erfurt, Germany	1,119,450 53	679,557 18	147,845 99
Transatlantic Fire	Hamburg	309,344 48	174,763 96	359,793 05
Union	London	933,901 67	519,716 25	673,264 30
Upper Rhine *	Mannheim	816,424 68	526,098 78	126,803 67
Western	Toronto	2,353,173 21	-----	583,807 80
Totals	-----	\$61,723,477 72	\$33,373,102 90	\$44,204,819 59

* Home office statement.

TABLE No. 34

Showing the various items composing the Assets of Fire and Fire and Marine Insurance Companies doing business in California on December 31, 1903—Companies of Foreign Countries.

Name.	Location.	Real Estate.	Loans on Mortgages.	Stocks and Bonds Owned.	Collateral Loans.	Cash in Office and Banks.
Aachen and Munich Fire	Aix-la-Chapelle, Ger.			\$838,631 25		\$123,481 88
Alliance	London	\$173,170 87		575,750 00		61,465 24
Atlas*	London	463,576 31	\$112,061 30	2,660,988 32		294,594 27
Austrian Phoenix*	Vienna	70,745 79		906,450 78		221,831 04
British America	Toronto			1,040,916 19		169,720 71
Caledonian	Edinburgh	433,187 16		967,800 00		187,396 82
Commercial Union	London	888,148 69	112,000 00	2,218,693 75		452,524 46
Hamburg-Bremen Fire	Hamburg			1,622,046 25		58,477 39
Helvetia Swiss Fire	St. Gall, Switzerland			589,007 50		1,007 42
Law Union and Crown	London	1,866,013 00		757,702 50		26,079 86
Liverpool and London and Globe.	Liverpool		3,498,750 00	3,767,406 25		1,317,133 34
London	London	300,000 00		2,133,063 75		288,538 04
London and Lancashire Fire	Liverpool			1,882,589 50		177,384 11
Manchester	Manchester	2,000 00		1,408,260 00		104,302 13
Netherlands Fire	The Hague			478,487 50		55,302 91
New Zealand	Auckland	200,000 00		268,940 00		5,544 63
North British and Mercantile*	London	3,135,327 08	193,098 40	14,782,303 10		737,725 87
Northern*	London	165,000 00		2,603,091 56		170,294 94
North German Fire*	Hamburg	94,000 00	140,625 00	388,303 61		63,306 28
Norwich Union Fire*	Norwich, Eng.	371,837 10	40,000 00	5,051,037 25		1,278,949 63
Palatine.	London			1,502,560 00		190,192 92
Phoenix	London			2,499,910 00		307,038 77
Prussian National	Stettin			873,075 12		23,452 80
Rhine and Moselle Fire*	Strasbourg	300,000 00	232,800 00	741,000 25		170,249 85
Royal	Liverpool	2,174,460 43	321,000 00	4,458,153 95		710,052 53
Royal Exchange*	London			1,724,300 00		91,356 88
Scottish Union and National	Edinburgh		870,053 35	2,958,236 75	\$2,000 00	280,876 06
State Fire.	Liverpool	243,758 80		315,620 00		19,717 28
Svea Fire and Life*	London	261,000 00	57,000 00	2,013,056 85		279,649 07
Thuringia.	Gothenburg, Sweden	518,000 00	4,011,972 58	2,543,519 00	1,516,561 14	171,769 18
Transatlantic Fire	Erfurt, Germany			894,770 82		177,014 87
Union.	Hamburg			423,660 00		28,993 68
Upper Rhine*	London	200,000 00		1,238,990 00		73,229 21
Western	Mannheim		413,575 00	502,462 18		189,620 73
	Toronto		20,000 00	1,770,306 39		143,912 88
Totals		\$11,860,225 23	\$10,022,935 63	\$69,396,090 37	\$1,516,561 14	\$8,658,187 63

* Home office statement.

TABLE No. 34—CONTINUED.

Name.	Location.	Interest due and Accrued.	Premiums in Course of Collection.	Bills Receivable, Not Matured, Taken for Fire and Marine Risks.	All Other Assets.	Total Assets.
Aachen and Munich Fire	Aix-la-Chapelle, Ger.		\$163,740 80	1,278 88		\$1,127,132 81
Alliance	London	\$1,750 00	85,865 03	100 00	500 00	898,601 14
Atlas *	London	31,701 35	555,032 72	16,583 45	9,031,974 00	13,166,511 72
Austrian Phoenix	Vienna	13,120 74		75,225 16	909,558 43	2,136,931 94
British America	Toronto	11,833 20	269,393 58			1,491,863 68
Caledonian	Edinburgh	12,443 55	128,625 80	367 93	4,532 25	1,734,353 51
Commercial Union	London	3,581 66	598,502 88	6,292 45	15,008 02	4,294,751 91
Hamburg-Bremen Fire	Hamburg			153,654 31		1,834,177 95
Helvetia Swiss Fire	St. Gall, Switzerland	5,500 00	5,618 33			601,133 25
Law Union and Crown	London	8,181 19	62,238 33			854,201 88
Liverpool and London and Globe	Liverpool	45,435 05	1,549,648 94		12,531 92	12,046,918 50
London	London	6,186 99	300,796 10		38,058 10	2,766,642 98
London and Lancashire Fire	Liverpool	30,487 33	294,448 78	2,326 81	114,385 34	2,801,621 87
Manchester	Manchester	13,454 17	251,865 98	341 42	67 98	1,780,291 68
Netherlands Fire	The Hague	2,129 14	11,600 21		193 60	512,713 36
New Zealand	Auckland		39,661 27	2,939 55	60	517,086 05
North British and Mercantile *	London	75,173 40	357,683 74	27,815 45	1,965,383 20	21,274,510 24
North *	London	10,676 28	451,254 29		170 76	3,400,487 83
North German Fire *	Hamburg	4,928 11	8,375 57		152,380 21	954,756 25
Norwich Union Fire *	Norwich, England	61,003 08	848,980 35			7,684,896 29
Palatine	London	2,360 17	246,859 18		4,014 06	1,946,036 33
Phoenix	London	32,105 00	137,210 03	50 00		2,978,911 95
Prussian National	Stettin	9,071 55	135,496 90		2,648 15	1,047,689 00
Rhine and Moselle Fire *	Strasbourg	14,896 99	41,982 46		592 63	1,593,671 20
Royal	Liverpool	53,694 84	885,222 97		92,741 65	8,454,632 16
Royal Exchange *	London	22,857 55	264,696 57		52,047 44	2,108,188 00
Scottish Union and National	Edinburgh	23,893 13	431,506 17		29,725 90	4,840,110 16
State Fire	Liverpool	2,633 33	15,345 05			353,315 66
Sun	London	26,625 90	274,580 33			2,911,882 15
Svea Fire and Life *	Gothenburg, Sweden	87,015 27	40,863 33		472,983 28	9,362,683 78
Thuringia	Erfurt, Germany	243 63	201,460 04			1,273,489 36
Transatlantic Fire	Hamburg	3,847 47	84,701 87	1,087 90	100,679 93	642,970 85
Union	London	13,228 35	171,087 31			1,696,534 87
Upper Rhine *	Mannheim			2,010 87	262 50	1,112,303 76
Western	Toronto	4,372 48	495,847 77	27,421 85		2,457,488 89
Totals		\$634,430 90	\$8,910,222 68	\$453,422 38	\$13,005,416 95	\$124,959,492 96

*Home office statement.

TABLE No. 35.

Showing the various items composing the Liabilities, except Capital Stock, of Fire and Fire and Marine Insurance Companies doing business in California on December 31, 1903—Companies of Foreign Countries.

Name.	Location.	Losses Adjusted.	Losses Unadjusted.	Losses Rejected.	Fire Reinsurance.
Aachen and Munich Fire	Aix-la-Chapelle, Germany	\$9,788 07	\$63,825 84	\$7,209 72	\$607,777 87
Alliance	London	1,702 47	17,961 77	---	235,049 63
Atlas*	Vienna	---	355,632 12	---	1,473,954 82
Austrian Phoenix*	Toronto	29,288 31	86,254 22	---	397,168 19
British America	Edinburgh	51,641 48	63,118 72	8,379 11	873,445 27
Caledonian	London	106,228 38	210,202 44	36,435 00	847,846 84
Commercial Union	Hamburg	18,145 00	68,965 00	17,500 00	2,259,649 53
Hamburg-Rhenen Fire	Hamburg	18 50	402 50	4,000 00	1,292,885 25
Helvetia Swiss Fire	St. Gall, Switzerland	8,364 23	9,905 79	11,381 25	13,450 16
Law Union and Crown	London	24 10	693,936 54	57,250 00	234,251 24
Liverpool and London and Globe	Liverpool	18,964 00	117,614 00	16,977 00	5,274,438 14
London	London	22,938 00	70,903 80	22,437 22	1,140,115 77
London and Lancashire Fire	Liverpool	25,881 66	56,325 24	22,742 00	1,647,005 51
Manchester	Manchester	4,317 08	4,542 25	7,250 00	1,033,916 91
Netherlands Fire	The Hague	---	14,296 61	6,370 00	85,845 50
New Zealand	Auckland	---	1,163,809 42	---	119,920 64
North British and Mercantile*	London	74,727 74	144,491 45	44,763 94	3,626,915 67
Northern*	London	13,594 29	---	51,366 25	1,846,910 87
North German Fire*	Hamburg	---	460,341 58	---	248,701 95
Norwich Union Fire*	Norwich, England	37,438 60	63,268 40	13,750 00	3,128,556 52
Palatine	London	66,451 00	152,180 92	22,979 00	919,743 11
Phoenix	Stettin	33,229 47	36,106 59	2,850 00	1,831,967 65
Prussian National	Strasbourg	21,960 98	22,290 42	5,180 00	528,266 54
Rhine and Moselle Fire*	Liverpool	53,424 56	317,124 27	64,259 50	242,190 32
Royal	London	58,736 92	60,183 00	11,325 00	4,302,051 37
Royal Exchange*	Edinburgh	12,515 44	132,544 78	24,600 00	949,457 74
Scottish Union and National	Liverpool	19,388 59	5,626 50	4,075 97	1,655,039 85
State Fire	London	---	173,805 59	17,502 10	103,013 80
Sun	Gothenburg, Sweden	63,191 33	168,000 00	---	1,728,951 80
Svea Fire and Life*	Erfurt, Germany	2,096 72	11,242 31	---	694,206 67
Thuringia	Hamburg	48,330 32	5,147 00	8,508 94	77,547 77
Transatlantic Fire	London	---	45,544 68	12,622 50	239,834 84
Union	Mannheim	---	335,822 00	---	701,216 63
Upper Rhine*	Toronto	27,891 87	96,802 87	7,302 79	95,625 29
Western	---	---	---	---	1,369,661 60
Totals	---	\$830,279 11	\$5,285,407 24	\$515,438 85	\$42,536,701 27

* Home office statement.

TABLE No. 35—CONTINUED.

Name.	Location.	Marine Reinsurance.	Liability under Life Department.	All Other Claims.	Total Liabilities.	Net Surplus.
Aachen and Munich Fire	Aix-la-Chapelle, Ger.			\$37,144 20	\$725,745 70	\$401,387 11
Alliance*	London			21,104 26	275,818 13	422,783 01
Atlas*	London		\$8,979,474 23	4,162 00	10,813,223 17	1,633,288 55
Austrian Phoenix*	Vienna		7,314 41	195,774 86	686,511 68	310,420 26
British America	Toronto			64,558 79	1,038,790 20	453,073 48
Caledonian	Edinburgh			29,613 58	992,722 08	741,631 43
Commercial Union	London			215,181 13	2,910,551 38	1,384,200 53
Hamburg-Bremen Fire	Hamburg	\$32,854 90			1,397,485 25	436,692 70
Helvetia Swiss Fire	St. Gall, Switzerland.			2,178 00	20,049 16	381,084 09
Law Union and Crown	London			7,612 77	271,515 28	382,686 60
Liverpool and London and Globe.	Liverpool		59,720 76	811,006 61	6,896,376 15	5,160,542 50
London	London	63,132 50		94,079 36	1,470,882 63	785,760 35
London and Lancashire Fire	Liverpool			34,282 07	1,797,626 60	1,003,995 27
Manchester	Manchester			66,850 63	1,205,716 44	574,575 24
Netherlands Fire	The Hague			2,551 08	104,505 91	238,207 45
New Zealand	Auckland			14,633 36	160,250 28	356,835 77
North British and Mercantile*	London		482,702 25	919,475 99	6,192,903 33	11,644,046 91
Northern*	London			191,994 06	2,302,888 06	897,599 77
North German Fire*	Hamburg	5,029 67		195,699 67	509,362 17	70,394 08
Norwich Union Fire*	Norwich, England			83,940 27	3,672,838 37	3,352,057 92
Palatine.	London			59,001 20	1,093,201 31	852,835 02
Phoenix	London			44,862 45	2,118,441 02	860,470 93
Prussian National	Stettin.			38,834 00	639,286 60	408,402 40
Rhine and Moselle Fire*	Strasburg			86,921 50	377,543 22	616,127 98
Royal	Liverpool			491,077 68	5,339,119 59	3,315,512 57
Royal Exchange*	London	10,598 88	100,583 33	65,589 52	1,086,555 26	1,021,632 74
Scottish Union and National	Edinburgh			182,081 20	2,083,002 75	2,577,107 41
State Fire	Liverpool			1,476 92	126,708 63	26,607 03
Sun	London			12,106 21	1,951,754 29	960,127 86
Svea Fire and Life*	Gothenburg, Sweden.		6,460,002 66	384,119 15	7,696,388 48	1,132,961 97
Thuringia.	Erfurt, Germany			73,661 96	925,643 37	147,845 99
Transatlantic Fire	Hamburg			27,590 30	339,793 05	339,793 05
Union	London			10,556 44	283,177 80	818,270 57
Upper Rhine*	Mannheim	88,012 27	151,486 26	64,554 27	735,500 09	136,803 67
Western	Toronto	106,346 17		64,675 79	1,672,681 09	583,807 80
Totals.		\$355,974 39	\$16,241,283 90	\$4,597,951 28	\$70,363,036 04	\$44,304,563 74

*Home office statement.

TABLE No. 36.

Showing the various items composing the Incomes of Fire and Marine Insurance Companies doing business in California on December 31, 1903—Companies of Foreign Countries.

Name.	Location.	Fire Premiums.	Marine Premiums	Interest on Mortgages.	Interest and Dividends from Other Sources.	From All Other Sources.	Total Income.
Aachen and Munich Fire.	Aix-la-Chapelle, Ger.	\$881,845 57			\$29,609 30	\$5,485 00	\$916,939 87
Alliance	London	352,703 59			35,950 30	5,660 36	424,314 25
Atlas*	London	2,665,345 48			97,967 30	22,997 70	2,776,310 48
Austrian Phoenix.	Vienna	962,447 38	\$1,607 67		40,043 28	376,290 95	1,380,389 28
British America	Toronto	1,281,215 33	261,441 97			37,353 16	1,560,010 46
Caledonian	Edinburgh	1,065,371 14			36,727 00	22,666 25	1,124,764 39
Commercial Union	London	2,864,701 53	183,036 78	\$7,697 73	68,454 78	56,979 69	3,180,870 51
Hamburg-Bremen Fire	Hamburg	1,697,431 26				58,570 64	1,756,001 90
Helvetia-Swiss Fire.	St. Gall, Switzerland.	11,751 58				55,075 71	66,827 29
Law Union and Crown.	London	369,800 65			20,724 13	22,600 00	412,124 78
Liverpool and London and Globe.	Liverpool	1,440,845 51			23,109 24	168,563 27	1,632,518 01
London	London	1,440,845 51	393,355 90	130,140 64	155,518 04	87,863 99	1,922,065 40
London and Lancashire Fire	Liverpool	6,857,553 74			87,255 56	1,609 23	6,945,411 53
Manchester	Manchester	1,906,463 79				56,830 72	1,963,294 51
Netherlands Fire	The Hague	1,408,734 23				11,130 72	1,420,865 95
New Zealand	Auckland.	159,823 66	22,777 51		16,216 57	27,842 90	206,659 64
North British and Mercantile*	London	170,691 24			8,000 00	655 62	179,346 86
North*	London	9,201,032 35			575,539 78	8,460 29	9,784,972 42
North German Fire*	London	2,305,082 80			106,347 73	13,665 32	2,425,095 85
Norwich Union Fire*	Hamburg	471,868 91		4,263 41	16,391 44	16,431 37	504,760 13
Palatine	Norwich, England	5,948,107 18		1,985 00	173,136 37	41,424 16	6,124,649 71
Phoenix	London	1,274,968 39				16,817 45	1,291,786 84
Prussian National	Stettin	2,470,181 74	2,881 96		81,806 85	30 00	2,554,900 55
Rhine and Moselle Fire*	Strasbourg	643,221 16			27,934 78	17,352 42	688,508 36
Royal	Liverpool	444,736 18		9,401 33	32,209 11	53,192 51	530,139 12
Royal Exchange*	London	4,995,755 15		35,207 12	156,172 43	268,199 74	5,455,234 44
Scottish Union and National	Edinburgh	1,146,425 95			65,344 63	27,145 07	1,238,915 65
State Fire.	Liverpool	1,901,840 97		47,820 55	95,911 18	10,423 67	2,055,995 37
Sun.	London	184,004 04				16,930 47	199,934 51
Svea Fire and Life*.	London	2,022,548 61		5,807 78	71,192 58	2,116,479 44	2,214,028 39
Thuringia	Gothenburg, Sweden.	1,714,794 42			350,476 57	968,569 17	2,023,860 16
Transatlantic Fire	Erfurt, Germany	1,162,886 59			37,627 95	3,012 68	1,203,527 22
Union	Hamburg	317,614 05			13,792 75	26,974 55	358,381 35
Upper Rhine*	London	1,046,303 08			42,039 74	32,829 57	1,121,169 39
Western	Mannheim	202,861 46	475,836 77	14,268 69	307,635 90	5,667 22	1,006,270 04
Totals	Toronto	2,698,472 07		1,080 80	66,037 45	7,824 38	2,873,414 70
		\$64,149,420 78	\$1,340,938 56	\$257,623 05	\$2,845,229 74	\$2,594,492 02	\$71,187,704 09

* Home office statement.

REPORT OF THE INSURANCE COMMISSIONER.

61

Name.	Location.	Fire Losses.	Marine Losses.	Dividends.	Brokerage and Commissions.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures
Aachen & Munich Fire Alliance	Aix-la-Chapelle-London	\$467,552 56 171,697 41	---	---	\$183,849 67 97,717 64	\$80,994 64 15,673 84	\$23,918 20 6,393 76	\$70,193 20	\$826,508 27 415,476 57
Atlas *	London	1,297,745 77	---	\$148,276 75	503,119 12	---	---	428,670 35	2,377,811 99
Austrian Phoenix *	Vienna	611,119 67	289 89	54,000 00	259,051 39	116,163 23	38,989 55	296,730 49	1,376,344 22
British America	Toronto	647,463 13	223,582 66	---	282,346 86	64,760 41	42,181 25	111,038 31	1,371,372 62
Caledonian	Edinburgh	550,459 96	---	---	246,389 35	82,312 05	25,800 66	56,851 10	961,313 12
Commercial Union	London	1,499,673 59	136,979 47	---	592,498 70	144,387 47	88,115 66	196,888 16	2,658,513 05
Hamburg-Bremen Fire	Hamburg	855,318 92	---	---	353,710 59	131,231 51	39,843 01	106,664 55	1,486,768 58
Helvetia Swiss Fire	St. Gall	31,690 38	---	---	3,445 74	3,250 00	702 86	36,857 11	75,946 09
Law Union & Crown	London	170,715 11	---	---	100,787 77	8,936 85	---	95,277 99	375,717 22
Liverpool and London and Globe	Liverpool	3,476,815 10	---	---	1,129,875 76	377,131 05	174,209 74	434,908 11	5,592,939 76
London and Lancashire Fire	London	879,246 23	---	---	343,897 87	111,865 12	58,927 62	131,119 53	1,525,056 37
Manchester	Liverpool	853,266 57	---	---	377,693 34	143,086 23	58,629 04	470,837 41	1,903,512 59
Netherlands Fire	Manchester	748,904 56	---	---	291,313 08	110,069 62	41,892 34	101,571 49	1,294,251 09
New Zealand	The Hague	95,076 40	---	---	44,895 78	9,999 99	1,310 10	36,648 79	188,031 06
North British and Mercantile *	Auckland	134,238 69	8,673 60	---	28,907 99	24,519 16	3,652 72	26,102 73	226,094 89
Northern *	London	4,786,234 55	---	952,223 00	1,590,287 16	1,479,778 30	17,711 60	12,463 88	8,838,698 49
North German Fire *	London	1,070,036 96	---	---	381,122 99	131,419 43	70,316 45	717,010 62	2,369,906 45
Norwich Union Fire *	Hamburg	254,891 45	---	18,750 00	39,674 34	62,430 06	5,355 06	103,447 31	489,548 22
Palatine	Norwich, Eng.	3,056,197 41	---	275,340 00	1,168,074 03	469,005 19	99,800 35	270,043 30	5,338,460 33
Phoenix	London	608,878 86	---	---	284,789 05	73,227 99	37,791 61	136,588 47	1,141,275 98
Prussian National	London	1,465,334 46	---	---	492,630 92	166,378 81	74,406 52	351,193 79	2,571,484 50
Rhine & Moselle Fire *	Stettin	313,083 83	---	1,997 99	141,617 92	45,581 24	19,394 43	48,672 73	570,350 14
Royal	Strasbourg	187,828 41	---	80,000 00	80,793 02	43,978 96	17,654 31	27,574 26	437,838 96
Royal Exchange *	Liverpool	2,478,899 31	---	---	831,083 38	395,264 27	152,087 54	333,670 37	4,191,004 90
Scottish Union and National	London	570,579 41	---	---	239,467 70	108,620 98	---	198,323 18	1,116,991 27
State Fire	Edinburgh	976,284 54	---	---	397,530 71	95,341 12	68,413 57	146,302 03	1,683,871 97
Sun	Liverpool	97,946 16	---	---	43,792 27	10,974 68	4,770 27	27,478 44	184,961 82
Svea Fire and Life *	London	1,007,983 41	---	---	543,435 20	112,817 53	53,771 38	126,615 25	1,844,622 77
Thuringia	Gothenburg	627,580 03	---	---	514,147 84	165,345 46	28,979 56	1,420,467 07	2,756,519 96
Transatlantic Fire	Erfurt, Germany	627,065 19	---	---	356,362 77	65,279 15	24,420 74	46,322 68	1,119,450 53
Union	Hamburg	177,787 82	---	---	86,806 13	44,983 85	19,246 08	19,246 08	309,344 48
Upper Rhine *	London	535,526 03	---	---	272,930 00	21,010 60	28,366 78	52,203 15	933,401 67
Western	Mannheim	121,685 20	298,078 60	---	61,596 60	222,555 36	3,074 98	109,433 84	816,424 58
Totals	Toronto	1,142,565 92	380,309 96	---	517,868 93	92,772 65	64,614 26	155,041 49	2,353,173 21
		\$32,602,375 03	\$1,047,914 18	\$1,528,587 74	\$12,884,111 66	\$5,231,038 16	\$1,379,489 77	\$6,326,422 18	\$61,723,477 72

* Home office statement.

TABLE No. 38.

Showing amount of Risks Written, Premiums Received, and amount of Risks in Force on December 31, 1903, with Premiums thereon, of Fire and Fire and Marine Insurance Companies doing business in California—Companies of Foreign Countries.

Name.	Location.	RISKS WRITTEN DURING THE YEAR.			
		Fire.	Premiums.	Marine.	Premiums.
Aachen and Munich Fire	Aix-la-Chapelle, Ger.	\$88,322,958 00	\$1,210,246 06		Total Premiums.
Alliance	London	39,001,450 00	500,635 74		\$1,210,246 06
Atlas*	London	1,092,125,070 00	4,097,426 54		500,635 74
Austrian Phoenix*	Vienna	1,286,955,428 00	3,656,240 37		4,097,426 54
British America	Toronto	122,598,895 00	1,653,294 44		3,656,240 37
Caledonian	Edinburgh	132,095,326 00	1,476,897 37		\$322,758 06
Commercial Union	London	336,037,564 00	4,031,730 15		1,976,052 50
Hamburg-Bremen Fire	Hamburg	149,486,017 00	2,048,231 39		1,476,897 37
Helvetia Swiss Fire	St. Gall, Switzerland	1,130,327 00	24,135 16		4,287,530 75
Law Union and Crown	London	45,101,678 00	536,855 29		2,048,231 39
Liverpool and London and Globe	Liverpool	995,384,801 00	10,552,180 75		24,135 16
London	London	124,474,433 00	1,903,503 40		536,855 29
London and Lancashire Fire	Liverpool	250,458,581 00	2,769,461 23		10,552,180 75
Manchester	Manchester	151,364,929 00	1,965,231 33		2,809,809 84
Netherlands Fire	The Hague	15,952,306 00	219,284 42		2,769,461 23
New Zealand	Auckland	13,548,161 00	247,146 09		1,965,231 33
North British and Mercantile*	London	3,476,162,530 00	9,110,902 85		219,284 42
Northern*	London	282,371,041 00	3,336,578 13		276,607 78
North German Fire*	Hamburg	519,826,283 00	1,255,205 81		9,110,902 85
Norwich Union Fire*	Norwich, England	2,083,668,500 00	7,533,323 33		3,336,578 13
Palatine	London	143,884,619 00	1,902,963 30		1,255,205 81
Phoenix	London	306,881,487 00	3,855,189 97		7,533,323 33
Prussian National	Stettin	64,881,016 00	900,236 34		1,902,963 30
Rhine and Moselle Fire*	Strasbourg	460,368,429 00	608,605 46		3,855,189 97
Royal	Liverpool	668,608,923 84	7,309,711 08		2,881 96
Royal Exchange*	London	167,868,165 00	1,945,731 10		748,929 00
Scottish Union and National	Edinburgh	290,287,715 00	3,396,645 67		
State Fire	Liverpool	17,777,131 00	240,345 91		
Sun	London	238,516,273 00	2,632,245 03		
Svea Fire and Life*	Gothenburg, Sweden	423,550,344 00	2,206,606 84		
Thuringia	Erfurt, Germany	111,417,525 05	1,579,684 34		
Transatlantic Fire	Hamburg	31,137,643 00	466,256 61		
Union	London	151,769,159 00	1,625,359 97		
Upper Rhine*	Mannheim				
Western	Toronto	260,047,277 00	2,838,477 72		
Totals		\$14,552,662,044 89	\$89,636,569 19	\$388,321,355 00	\$91,760,173 31

* Home office statement.

TABLE NO. 38—CONTINUED.

Name.	Location.	RISKS IN FORCE DECEMBER 31, 1903.			
		Fire.	Premiums.	Marine.	Premiums.
Aachen and Munich Fire.	Aix-la-Chapelle, Ger.	\$88,103,845 00	\$1,155,970 25		\$1,155,970 25
Alliance	London	35,355,976 00	455,731 26		455,731 26
Atlas*	London	703,941,716 00	2,919,249 80		2,919,249 80
Austrian Phoenix*	Vienna	213,403,690 00	397,168 19		397,168 19
British America	Toronto	120,360,990 00	1,580,110 80	\$3,436,908 00	\$82,828 06
Caledonian	Edinburgh	157,006,720 00	1,645,792 53		1,662,938 86
Commercial Union	London	397,124,665 00	4,451,558 78		1,645,792 53
Hamburg-Bremen Fire	Hamburg	197,674,633 00	2,537,308 66	4,594,321 00	2,537,308 66
Helvetia Swiss Fire.	St. Gall, Switzerland	2,252,898 00	34,447 78		34,447 78
Law Union and Crown	London	38,942,797 00	465,238 56		465,238 56
Liverpool and London and Globe.	Liverpool	958,557,912 00	10,174,066 05		10,174,066 05
London	London	203,910,391 00	2,268,974 02	11,128,303 00	82,290 37
London and Lancashire Fire	Liverpool	336,967,732 00	3,244,190 30		2,351,264 39
Manchester	Manchester	168,895,208 00	2,046,742 43		3,244,190 30
Netherlands Fire	The Hague	12,537,906 00	168,502 29		2,046,742 43
New Zealand	Auckland	14,043,728 00	240,814 40		168,502 29
North British and Mercantile*	London	3,071,811,845 00	7,267,676 77	337,905 00	249,039 67
North German Fire*	London	308,283,111 00	3,529,994 79		7,267,676 77
Norwich Union Fire*	Hamburg	156,691,112 00	478,100 46		3,529,994 79
Norwich Union Fire*	Norwich, England	1,313,556,350 00	6,187,550 77		478,100 46
Palatine	London	140,398,865 00	1,763,293 85		6,187,550 77
Phoenix	London	312,841,448 00	3,632,678 20		1,763,293 85
Prussian National	Stettin	79,020,746 00	1,026,130 93	540 00	3,632,678 20
Rhine and Moselle Fire*	Strasbourg	447,356,846 00	483,658 40		1,026,134 98
Royal	Liverpool	802,583,893 04	8,326,302 74		483,658 40
Royal Exchange*	London	154,377,135 00	1,772,065 11		8,326,302 74
Scottish Union and National	Edinburgh	311,891,652 00	3,350,558 20		1,772,065 11
State Fire.	Liverpool	14,883,321 00	201,618 76		3,350,558 20
Sun	London	335,505,178 00	3,402,108 95		201,618 76
Svea Fire and Life*	Gothenburg, Sweden	229,551,356 00	1,450,109 91		3,402,108 95
Thuringia	Erfurt, Germany	103,080,437 53	1,466,356 45		1,450,109 91
Transatlantic Fire	Hamburg	30,782,906 00	450,938 97		1,466,356 45
Union	London	125,697,078 00	1,387,519 55		450,938 97
Upper Rhine*	Mannheim				1,387,519 55
Western	Toronto	229,977,717 00	2,696,785 45	6,840,379 00	2,696,785 45
Totals		\$12,317,371,803 57	\$82,668,014 36	\$26,338,356 00	\$83,154,134 64

* Home office statement.

REPORT OF THE INSURANCE COMMISSIONER.

TABLE No. 39.

Summary of Assets, Liabilities, Incomes, Expenditures, etc., of Marine Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Cash, Capital Paid Up.	Assets.	Liabilities, Capital Not Included.	Incomes.	Expenditures, during the Year.	Losses Incurred During the Year.	Net Surplus.
Alliance	Berlin	\$250,000 00	\$2,200,252 79	\$1,393,055 80	\$1,514,923 12	\$1,265,181 95	---	\$557,196 99
Alliance Marine	London	1,000,000 00	2,974,670 00	200,390 00	767,495 00	995,185 00	\$567,070 00	1,000,000 00
American and Foreign Marine.	New York	200,000 00	4,574,034 89	65,618 05	111,537 49	85,109 96	55,811 29	191,416 84
Australian Alliance	Melbourne	625,000 00	1,045,440 00	131,955 00	284,855 00	323,485 00	165,860 00	288,485 00
Balose	Boston	1,000,000 00	690,800 16	201,338 00	380,268 71	354,973 73	288,962 16	288,962 16
Boston Marine.	Boston	2,000,000 00	3,818,488 63	962,261 61	1,626,129 10	1,404,574 91	798,196 57	1,856,227 02
British and Foreign Marine	Liverpool	1,302,480 00	7,826,474 45	1,316,026 36	2,332,830 35	2,482,166 04	1,884,977 00	5,207,968 09
Canton.	Hong Kong	250,000 00	1,620,138 02	477,109 87	949,683 66	822,249 77	945,070 22	752,677 99
China Traders	Hong Kong	240,000 00	1,274,087 74	455,597 95	681,901 03	586,648 40	570,070 87	360,000 00
Federal	Jersey City	500,000 00	1,790,914 59	598,274 73	1,818,363 65	770,639 49	376,290 36	692,639 86
Fonciere	Paris	1,250,000 00	3,972,962 65	1,647,727 70	7,818,618 14	1,494,379 60	---	1,075,234 95
Helvetia General.	St. Gall, Switz'd	400,000 00	1,475,066 03	450,455 67	506,036 41	495,078 81	284,819 52	624,610 36
Imperial Marine	Tokio	375,000 00	587,555 60	107,268 15	396,538 61	246,194 79	147,864 95	105,287 45
Indemnity Mutual Marine	London	1,005,000 00	4,319,110 29	283,425 29	2,286,987 02	1,854,995 04	---	3,157,901 00
London and Provincial Marine	London	500,000 00	2,211,996 20	412,448 30	1,458,888 25	1,364,518 90	1,208,980 20	1,299,547 90
and General.	Mannheim*	---	494,211 32	154,031 03	713,550 61	692,157 97	389,466 02	340,180 29
Mannheim*	Hong Kong	---	654,658 06	81,814 19	240,002 66	199,286 37	51,623 25	72,843 87
Man On	London	500,000 00	6,623,545 39	362,245 25	1,394,651 27	1,312,779 55	---	5,361,300 14
Marine.	Liverpool	900,000 00	2,691,677 19	1,327,715 52	1,336,896 41	1,276,742 69	1,131,143 00	863,961 67
Maritime	Hamburg	267,857 14	1,987,175 97	1,421,930 25	1,334,153 53	1,174,377 28	987,392 19	214,289 28
Nord Deutsche.	Shanghai	600,000 00	1,196,240 98	133,395 32	469,481 56	393,199 69	172,460 52	462,875 66
North China	London	500,000 00	2,843,491 25	287,175 00	964,070 00	806,870 00	---	875,000 00
Ocean Marine	Hong Kong	400,000 00	507,053 49	52,502 00	358,737 50	359,915 50	314,790 50	25,400 00
Po On	Liverpool	500,000 00	1,546,101 00	313,973 42	723,231 63	716,667 07	524,855 00	732,127 58
Reliance Marine	Liverpool	500,000 00	4,518,442 58	1,064,872 17	1,922,894 99	1,299,996 41	978,589 42	2,953,570 41
Sea	Liverpool	500,000 00	1,864,204 00	400,613 00	597,739 00	614,501 00	470,502 00	963,651 00
Standard Marine.	Zurich	200,000 00	1,073,909 67	748,255 16	524,568 66	457,084 60	---	125,654 51
Switzerland Marine.	Liverpool	1,000,000 00	6,845,849 25	1,644,039 25	2,144,843 00	2,212,761 25	1,793,828 25	4,001,810 00
Thames and Mersey	Liverpool	817,500 00	5,220,326 48	1,584,954 08	2,531,942 22	2,406,938 12	2,090,267 81	2,817,872 40
Union Marine	Liverpool	300,000 00	787,578 36	430,201 26	1,096,831 48	833,831 95	704,528 24	57,377 10
Univervo.	Milan	750,000 00	15,164,903 99	13,938,808 11	3,751,631 81	2,559,203 60	365,090 27	476,097 87
Wilhelma	Magdeburg	300,600 00	1,024,637 81	314,288 76	767,116 70	865,317 16	596,854 27	409,749 09
World Marine	London	262,800 00	1,026,904 37	176,367 64	519,333 98	---	---	590,240 73
Yangtse	Shanghai	---	---	---	---	---	---	---
Totals	---	\$17,896,237 14	\$92,135,963 20	\$33,140,631 89	\$36,789,732 55	\$33,300,173 44	\$18,432,169 43	\$38,802,157 17

* United States branch statement.

TABLE No. 40.

Showing the various items composing the Assets of Marine Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Real Estate.	Mortgage Loans.	Stocks and Bonds.	Collateral Loans.	Cash in Office and in Banks.
Alliance	Berlin	\$519,660 24	\$145,000 00	\$513,704 93	---	\$427,111 83
Alliance Marine	London	185,000 00	---	2,548,380 00	---	41,960 00
American and Foreign Marine	New York	---	---	421,475 84	---	12,447 89
Australian Alliance	Melbourne	---	---	382,017 07	\$166,905 00	29,150 00
Balaise	Basle	273,500 00	440,790 00	56,275 00	---	65,757 71
Boston Marine	Boston	22,000 00	52,000 00	1,788,553 25	---	430,681 66
British and Foreign Marine	Boston	17,958 59	1,260,250 00	6,235,443 18	16,750 00	342,921 40
Canton	Liverpool	449,410 98	17,500 00	414,576 62	65,367 00	163,874 12
China Traders	Hong Kong	---	680,347 59	359,985 51	---	424,275 69
Federal	Hong Kong	---	358,162 55	1,105,374 25	---	408,192 82
Fonciere	Jersey City	---	---	2,097,628 52	---	229,282 45
Helvetia General	Paris	590,392 33	---	543,431 92	---	233,641 16
Imperial Marine	St.Gall, Switzerland	53,000 00	427,495 25	176,620 00	---	112,064 22
Indemnity Mutual Marine	Tokio	14,214 00	---	2,750,844 00	187,900 00	201,717 29
London and Provincial Marine and General	London	1,073,878 50	---	1,663,305 40	---	372,413 85
Mannheim*	London	---	---	372,000 00	---	27,348 02
Man On	Mannheim	---	---	---	---	305,571 13
Marine	Hong Kong	---	235,000 00	---	---	91,861 55
Maritime	London	419,361 75	---	5,777,742 29	---	63,449 86
Nord Deutsche	Liverpool	---	---	2,121,865 75	75,000 00	89,992 68
North China	Hamburg	---	295,190 48	749,535 48	11,066 67	190,186 05
Ocean Marine.	Shanghai	183,874 46	67,800 00	673,917 60	---	158,610 00
Po On.	London	375,000 00	---	2,138,721 25	---	301,427 55
Reliance Marine	Hong Kong	---	120,156 44	---	---	33,084 13
Sea	Liverpool	---	---	1,284,953 70	1,250 00	298,874 71
Standard Marine	Liverpool	---	---	3,645,068 79	282,500 00	251,748 00
Switzerland General	Liverpool	---	---	1,392,205 00	---	74,367 52
Thames and Mersey	Zurich	---	---	626,553 80	---	109,019 50
Union Marine	Liverpool	389,833 00	---	5,810,005 00	85,000 00	165,998 60
Universo	Liverpool	---	---	3,921,163 50	131,250 00	206,654 99
Wilhelma.	Milan	---	---	253,320 00	---	140,479 00
World Marine	Magdeburg	1,231,596 96	12,680,994 22	64,433 41	---	26,009 87
Yangtse	London	---	---	872,312 12	---	240,054 16
	Shanghai	---	284,793 23	347,866 30	---	---
Totals		\$5,798,680 81	\$17,065,479 76	\$52,101,078 63	\$1,023,588 67	\$6,271,670 46

* United States branch statement.

REPORT OF THE INSURANCE COMMISSIONER.

TABLE No. 40—CONTINUED.

Name.	Location.	Interest Due and Accrued.	Premiums in Course of Collection.	Bills Receivable, Not Matured, Taken for Marine Risks.	All Other Assets.	Total Assets.
Alliance	Berlin	\$2,137 57	\$165,215 00	—	\$592,638 22	\$2,200,252 79
Alliance Marine	London	16,345 00	11,839 94	\$7,770 00	10,000 00	2,974,570 00
American and Foreign Marine	New York	3,279 15	15,860 00	—	7,992 07	457,034 89
Australian Alliance	Melbourne	4,740 00	165,927 58	550 00	57,670 00	1,045,440 00
Baloise	Basel	3,097 80	213,363 44	—	—	690,800 16
Boston	Boston	14,499 94	610,283 36	67,238 35	9,293 40	3,818,488 63
British and Foreign Marine	Liverpool	38,614 55	124,962 43	8,922 47	58,011 51	7,826,474 45
Canton	Hong Kong	8,285 44	73,781 42	—	228,391 82	1,620,138 02
China Traders	Hong Kong	13,372 89	189,896 72	13,047 63	31,462 05	1,274,087 74
Federal	Jersey City	16,483 19	620,986 40	—	71,467 61	1,790,914 59
Fonciere	Paris	—	194,414 18	3,496 95	431,176 00	3,972,962 65
Helvetia General	St. Gall, Switzerland	14,455 74	64,629 77	—	8,637 78	1,475,086 03
Imperial Marine	Tokio	—	276,930 63	32,127 61	—	587,555 60
Indemnity Mutual Marine	London	—	176,276 95	3,037 50	12,672 37	4,319,110 29
London and Provincial Marine and General	London	—	91,641 64	3,221 66	—	2,211,996 20
Mannheim*	Mannheim	—	30,785 56	—	—	494,211 32
Man On	Hong Kong	4,030 27	334,579 80	—	79,271 10	654,658 06
Marine	London	—	428,107 54	—	—	6,623,545 39
Maritime	Liverpool	—	373,728 52	—	—	2,691,677 19
Nord Deutsche	Hamburg	13,404 23	68,903 27	—	3,254 04	1,387,175 97
North China	Shanghai	8,098 06	146,805 00	40,121 30	413,536 61	1,196,240 98
Ocean Marine	London	24,355 00	81,234 50	3,461 54	—	2,843,491 25
Pacific	Hong Kong	4,235 00	186,730 62	—	—	507,053 49
Pacific	Liverpool	14,097 89	203,454 96	—	—	1,546,101 00
Reliance Marine	Liverpool	3,511 25	201,112 00	5,210 25	25,984 66	4,518,442 58
Sea	Liverpool	16,632 00	148,753 74	2,507 00	79,792 62	1,864,244 00
Standard Marine	Zurich	3,274 73	557,785 25	120,226 92	100,732 96	1,073,909 67
Switzerland General	Liverpool	81,872 50	304,287 85	26,321 50	5,845 50	6,645,849 25
Thames and Mersey	Liverpool	38,995 15	279,647 77	119,420 15	149,378 23	5,220,326 48
Union Marine	Milan	—	75,564 98	7,817 09	40,138 51	787,578 36
Universo	Magdeburg	306 32	115,624 69	—	971,529 10	15,164,903 99
Wilhelma	London	10,670 92	143,823 24	—	20 21	1,024,637 81
World Marine	London	9,347 96	—	—	1,019 48	1,026,904 37
Yangtze	Shanghai	—	—	—	—	—
Totals		\$369,272 55	\$6,878,535 58	\$464,497 92	\$3,389,915 85	\$93,362,720 23

*United States branch statement.

TABLE No. 41.
Showing the various items composing the Liabilities, except Capital Stock, of Marine Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Losses Adjusted.	Losses Unadjusted.	Losses Resisted.	Dividends Unpaid.	Marine Reinsurance.	All Other Claims.	Total Liabilities, Capital Not Included.	Net Surplus.
Alliance	Berlin		\$552,725 89		\$37 50	\$262,760 11	\$577,532 30	\$1,393,055 80	\$557,196 99
Alliance Marine	London		25,405 00		2,180 00	137,795 00	35,010 00	200,390 00	1,774,280 00
American & For'n Marine	New York		4,305 00		10,000 00	16,993 53	30,883 52	65,618 05	191,416 84
Australian Alliance	Melbourne	\$9,220 00		\$3,436 00	2,075 00	67,040 00	53,620 00	131,955 00	288,485 00
Balaise	Boston					79,983 80		201,388 00	288,962 16
Boston Marine	Boston	21,095 75	199,341 78	5,500 00		199,479 44	536,844 64	962,261 61	1,856,227 02
British & Foreign Marine	Liverpool		579,098 16		2,163 43	465,257 52	269,507 25	1,316,026 36	5,207,968 09
Canton	Hong Kong		102,487 82	9,092 03	297,157 41	297,157 41	64,947 61	477,109 87	752,677 99
China Traders	Hong Kong		62,763 00		9,755 10	195,478 69	187,601 16	455,597 95	360,000 00
Federal	Jersey City		202,397 62			69,685 55	326,197 56	598,274 73	692,938 86
Fonciere	Paris		868,601 74		4,846 06	346,070 08	428,209 82	1,647,727 70	1,075,234 95
Helvetia General	St. Gall, Switz.		196,699 62			107,598 24	146,157 81	450,455 67	624,610 36
Imperial Marine	Tokio		4,866 11		88 75	57,666 96	44,646 33	107,268 15	105,287 45
Indemnity Mutual Marine	London		29,278 79		1,146 50	253,000 00		283,425 29	3,157,901 00
London and Provincial Marine and General	London		74,845 00	10,000 00	757 60	291,406 90	35,378 80	412,448 30	1,299,547 90
Mannheim*	Mannheim		44,051 97			88,682 22	21,296 84	154,031 03	340,180 29
Man On	Hong Kong	28,000 00				3,814 19	50,000 00	81,814 19	72,843 87
Marine	London		43,920 00			89,377 50	228,947 75	362,245 25	5,361,300 14
Maritime	Liverpool		609,045 00		2,092 50	647,785 73	68,792 29	1,327,115 52	803,961 67
Nord Deutsche	Hamburg		719,852 58			343,138 06	358,939 61	1,421,930 25	214,289 28
North China	Shanghai		40,000 00		1,478 44	58,389 16	32,572 72	133,395 32	462,875 66
Ocean Marine	London	20,025 00	10,500 00			173,320 00	83,350 00	287,175 00	2,056,316 25
Po On	Hong Kong	2,146 00	1,000 00	33,905 00	1,564 00	13,452 00	435 00	52,502 00	25,400 00
Reliance Marine	Liverpool		152,000 00		143 00	132,064 85	29,705 57	313,973 42	732,127 58
Sea	Liverpool	9,821 86	605,748 14		60 00	339,267 56	109,974 61	1,064,872 17	2,953,570 41
Standard Marine	Liverpool		132,400 00			139,740 00	128,473 00	400,613 00	983,651 00
Switzerland General	Zurich		366,041 80		94 00	128,548 05	253,568 31	748,255 16	135,654 51
Thames and Mersey	Liverpool		366,720 00		3,506 25	1,201,423 75	72,389 29	1,644,039 25	4,001,810 00
Union Marine	Liverpool		533,185 00			493,440 00	557,448 08	1,584,954 08	2,817,872 40
Universo	Milan		183,874 80		881 00	217,431 28	28,895 18	430,201 26	57,377 10
Wilhelma	Magdeburg		77,138 75			54,822 27	13,806,845 09	13,938,806 11	476,097 87
World Marine	London		85,000 00		48 75	211,890 00	17,350 01	314,288 76	409,749 67
Yangtse	Shanghai	63,375 00	19,500 00		2,737 64	50,000 00	40,755 00	176,367 64	587,736 73
Totals		\$153,683 61	\$6,899,488 05	\$62,233 03	\$49,080 52	\$7,234,019 85	\$19,484,767 24	\$34,005,493 50	\$40,917,517 84

*United States branch statement.

REPORT OF THE INSURANCE COMMISSIONER.

TABLE No. 42.

Showing the various items composing the Incomes of Marine Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Marine Premiums.	Interest on Mortgage Loans.	Interest and Dividends from All Other Sources.	From All Other Sources.	Total Income.
Alliance	Berlin	\$468,033 70	\$5,850 00	\$35,508 54	\$1,005,530 88	\$1,514,923 12
Alliance Marine	London	670,400 00		91,095 00		767,495 00
American and Foreign Marine	New York	99,469 13	11,423 51		644 85	111,537 49
Australian Alliance	Melbourne	115,940 00	17,360 00		143,500 00	284,855 00
Baloise	Basle	362,614 30		17,654 41		380,268 71
Boston Marine	Boston	849,359 89	53,242 73	85,041 89	638,484 59	1,626,129 10
British and Foreign Marine	Liverpool	2,070,800 38		229,847 86	32,182 41	2,332,830 35
Canton	Hong Kong	863,553 49	46,621 46	27,161 59	12,347 12	949,683 66
China Traders	Hong Kong	631,900 75	25,228 64	24,740 96	30 68	681,901 03
Federal	Jersey City	682,240 73		57,021 05	79,101 87	818,363 65
Fonciere	Paris	1,698,503 09		83,115 05		1,781,618 14
Helvetia General	St. Gall, Switzerland	462,844 76	17,501 07	25,690 58		506,036 41
Imperial Marine	Tokio	258,728 12	12,177 14	22,322 60	103,310 75	394,538 61
Indemnity Mutual Marine	London	2,143,662 69		118,771 71	24,552 62	2,286,987 02
London and Provincial Marine and General	London	1,385,128 70		73,759 55		1,458,888 25
Mannheim*	Mannheim	713,550 61	22,676 30		16,271 08	713,550 61
Man On	Hong Kong	180,595 49		20,459 79		240,002 66
Marine	London	1,270,719 92		123,931 35		1,394,651 27
Maritime	Liverpool	1,240,131 48		76,564 50	200 43	1,386,896 41
Nord Deutsche	Hamburg	1,191,558 29	9,844 60	30,631 59	2,119 05	1,234,153 53
North China	Shanghai	417,077 00	4,824 00	47,530 76	49 80	469,481 56
Ocean Marine	London	878,030 00		71,475 00	14,565 00	964,070 00
Po On	Hong Kong	331,000 00		18,118 50	9,619 00	358,737 50
Reliance Marine	Liverpool	682,355 66		40,812 85	63 12	723,231 63
Sea	Liverpool	1,388,067 87		134,787 75	39 37	1,522,894 99
Standard Marine	Liverpool	549,776 00		47,963 00		597,739 00
Switzerland General	Zurich	503,277 99		21,290 67		524,568 66
Thames and Mersey	Liverpool	1,943,092 50		200,859 00	891 50	2,144,843 00
Union Marine	Liverpool	2,380,671 51		151,046 96	223 75	2,531,942 22
Universo	Milan	1,086,936 52		9,894 96		1,096,831 48
Wilhelma	Magdeburg	353,138 73	515,007 05	46,746 91	2,836,739 12	3,751,631 81
World Marine	London	737,001 77		30,069 06	45 87	767,116 70
Yangtse	Shanghai	474,035 99	19,650 36	25,620 07	27 56	519,333 98
Totals		\$29,110,197 06	\$761,406 86	\$1,997,588 21	\$4,920,540 42	\$36,789,732 55

*United States branch statement.

TABLE No. 43.

Showing the various items composing the Expenditures of Marine Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Marine Losses.	Dividends.	Brokerage and Commissions.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures.
Alliance.....	Berlin.....	\$305,195 34	\$55,000 00	\$412,026 64	\$18,747 71	\$3,201 34	\$471,010 92	\$1,265,181 95
Alliance Marine.....	London.....	684,335 00	100,360 00	19,400 00	130,695 00	17,865 00	42,530 00	995,185 00
American and Foreign Marine.....	New York.....	53,591 05	10,000 00	10,060 03	7,664 01	1,663 64	2,131 23	85,109 96
Australian Alliance.....	Melbourne.....	115,175 00	62,415 00	22,650 00	25,125 00	9,890 00	88,230 00	323,485 00
Baloise.....	Basle.....	248,945 17	30,000 00	38,685 54	37,243 02	373,751 62	37,243 02	354,873 73
Boston Marine.....	Boston.....	517,723 16	120,000 00	227,722 68	131,771 82	33,605 63	373,751 62	1,404,574 91
British and Foreign Marine.....	Liverpool.....	1,884,976 80	260,496 00	33,465 11	243,345 24	20,222 11	39,660 78	2,482,166 04
Canton.....	Hong Kong.....	598,530 07	75,000 00	71,625 13	56,487 53	20,606 04	20,606 04	822,249 77
China Traders.....	Hong Kong.....	371,746 89	35,936 73	28,899 73	76,942 48	73,122 57	73,122 57	586,648 40
Federal.....	Jersey City.....	410,846 77	50,000 00	164,913 93	30,002 23	12,583 44	102,293 12	770,639 49
Fonciere.....	Paris.....	1,027,895 12	50,000 00	263,689 52	191,693 80	11,101 16	16,023 45	1,494,379 60
Helvetia General.....	St. Gall, Switzerland.....	284,819 52	96,000 00	53,876 86	31,830 01	10,528 97	16,023 45	495,078 81
Imperial Marine.....	Tokio.....	90,879 62	37,500 00	36,113 21	45,772 21	3,530 70	32,399 05	246,194 79
Indemnity Mutual Marine.....	London.....	1,448,343 71	199,853 50	---	76,138 37	---	130,659 46	1,854,995 04
London and Provincial Marine and General.....	London.....	1,223,785 20	50,000 00	---	80,295 90	5,207 70	5,230 10	1,304,518 90
Mannheim*.....	Mannheim.....	386,521 67	---	115,961 56	34,878 64	16,732 43	138,063 67	692,157 97
Man On.....	Hong Kong.....	51,623 25	50,000 00	---	38,077 90	---	59,595 22	199,294 37
Marine.....	London.....	781,271 20	400,000 00	---	97,112 05	---	34,996 30	1,312,779 65
Maritime.....	Liverpool.....	1,119,853 22	50,000 00	23,173 83	43,423 77	1,972 95	38,318 92	1,276,742 69
Nord Deutsche.....	Hamburg.....	885,448 71	32,142 86	178,571 43	73,809 52	3,214 29	1,190 47	1,174,377 28
North China.....	Shanghai.....	218,891 25	67,665 07	7,019 64	87,356 07	7,163 80	5,103 86	393,194 69
Ocean Marine.....	London.....	698,880 00	---	---	107,990 00	---	---	806,870 00
Po On.....	Hong Kong.....	387,489 00	40,000 00	---	---	---	32,426 50	359,915 50
Reliance Marine.....	Liverpool.....	548,362 84	50,000 00	---	106,815 48	11,488 75	---	716,667 07
Sea.....	Liverpool.....	965,629 42	112,500 00	93,818 48	92,320 37	35,660 87	37 27	1,290,966 41
Standard Marine.....	Liverpool.....	477,377 00	87,500 00	---	44,197 11	6,426 89	---	614,501 00
Switzerland General.....	Zurich.....	348,623 05	---	37,241 77	47,741 21	4,840 92	18,637 65	457,084 60
Thames and Mersey.....	Liverpool.....	1,739,433 25	200,002 00	---	191,437 78	32,006 92	49,881 30	2,212,701 25
Union Marine.....	Liverpool.....	2,090,267 81	143,062 50	4,921 58	128,354 40	42,618 12	57,733 71	2,466,958 12
Univervo.....	Milan.....	704,528 24	---	---	134,734 99	4,568 72	---	893,881 95
Wilhelma.....	Magdeburg.....	329,357 60	162,500 00	30,760 33	24,099 66	6,579 61	2,005,966 40	2,559,203 60
World Marine.....	London.....	596,854 27	7,515 00	13,645 67	56,345 98	5,293 58	185,662 66	865,317 16
Yangtse.....	Shanghai.....	327,700 64	53,280 00	24,820 90	51,712 49	2,668 50	53,049 31	513,231 84
Totals.....	---	\$21,824,900 84	\$2,638,728 66	\$1,915,004 57	\$2,496,918 73	\$298,534 88	\$4,126,055 76	\$33,300,143 44

* United States branch statement.

TABLE No. 44.

Showing the amount of Risks Written, Premiums Received, and the amount of Risks in Force on December 31, 1903, with Premiums thereon, of Marine Insurance Companies doing business in California.

Name.	Location.	Risks Written.	Premiums Thereon.	Risks in Force December 31, 1903.	Premiums.
Alliance	Berlin	\$280,140,680 00	\$2,437,223 96	\$19,558,360 00	\$187,760 11
Alliance Marine	London	426,392,895 00	1,051,340 00	34,030,105 00	206,320 00
American and Foreign Marine	New York	157,927,533 00	214,262 80	1,545,203 00	16,993 53
Australasian Alliance	Melbourne	22,364,350 00	210,550 00	3,164,985 00	30,170 00
Baioise	Basle	586,622,567 00	542,483 32	21,927,379 00	77,983 80
Boston Marine	Boston	141,013,313 00	1,013,295 25	6,433,314 00	325,769 61
British and Foreign Marine	Liverpool	1,141,209,186 00	4,068,762 84	38,478,763 00	1,176,105 42
Canton	Hong Kong	238,558,421 00	1,214,803 59	15,334,230 00	234,754 36
China Traders.	Hong Kong	169,376,320 00	903,777 46	36,137,731 00	195,478 69
Federal	Jersey City	472,353,205 00	1,679,656 93	28,760,986 00	113,697 03
Fonciere	Paris				
Helvetia General	St Gall, Switzerland	527,464,720 00	758,857 57	8,010,179 00	107,598 24
Impertal Marine	Tokio	52,254,278 00	292,900 27	2,356,530 00	81,681 14
Indemnity Mutual Marine	London	361,546,022 00	1,915,421 00	25,749,383 00	340,800 00
London and Provincial Marine and General	London	202,823,495 00	1,681,411 35	32,902,660 00	291,466 90
Mannheim *	Mannheim	206,048,174 00	938,559 42	19,567,818 00	88,682 22
Man On	Hong Kong	85,223,626 00	186,586 08	3,879,215 00	7,628 38
Marine	London				
Maritime	Liverpool	283,688,390 00	1,276,845 00	47,941,460 00	647,785 00
Nord Deutsche	Hamburg				
North China	Shanghai				
Ocean Marine	London	240,595,350 00	1,087,045 00	38,597,585 00	753,120 00
Po On	Hong Kong	128,265,000 00	346,185 00	20,811,000 00	37,901 00
Reliance Marine.	Liverpool	190,933,615 00	954,322 58	11,781,790 00	132,064 85
Sea	Liverpool	231,485,460 00	1,357,070 21	21,119,585 00	339,267 56
Standard Marine	Liverpool	67,834,925 00	557,002 00	11,246,200 00	139,740 00
Switzerland (General	Zurich				
Thames and Mersey	Liverpool	510,245,040 00	3,453,345 50	100,335,025 00	1,588,890 00
Union Marine	Liverpool	443,945,470 00	3,435,177 68	58,440,795 00	856,486 25
Universo	Milan				
Wilhelma	Magdeburg	221,501,325 00	423,659 19	5,979,998 00	54,822 27
World Marine	London				
Yangtse	Shanghai	146,539,000 00	678,485 18	3,333,000 00	50,000 00
Totals		\$7,536,352,360 00	\$32,678,029 18	\$617,403,289 00	\$8,082,966 36

* United States branch statement.

TABLE No. 45—RECAPITULATION.

Summary of Assets, Liabilities, Incomes, Expenditures, etc., of Fire and Marine Insurance Companies doing business in California on December 31, 1903.

	Paid-up Capital.	Assets.	Liabilities.	Incomes.	Expenditures.	Losses Incurred during the Year.	Net Surplus.
California companies	\$1,300,000 00	\$7,269,833 67	\$3,457,016 83	\$4,536,044 67	\$3,749,399 94	\$2,172,413 05	\$2,512,816 84
Companies of other states	41,102,875 00	233,395,055 03	118,521,657 52	129,397,425 70	108,457,083 73	59,341,792 28	73,770,522 51
Companies of foreign countries	9,275,833 33	124,969,492 96	70,363,039 04	71,187,704 09	61,723,477 72	33,373,102 90	44,204,819 58
Marine companies	17,896,237 14	92,135,963 20	33,140,631 89	36,789,732 55	33,300,173 44	18,432,109 43	38,802,157 17
Totals	\$69,574,945 47	\$457,760,344 86	\$225,482,345 28	\$241,910,907 01	\$207,230,134 83	\$113,319,477 66	\$159,290,316 10

TABLE No. 46—RECAPITULATION.

Showing the various items composing the Assets of Fire and Marine Insurance Companies doing business in California on December 31, 1903.

	Real Estate.	Mortgage Loans.	Stocks and Bonds Owned.	Collateral Loans.	Cash in Office and Banks.
California companies	\$625,000 00	\$365,492 50	\$4,507,921 00	\$477,550 00	\$412,218 70
Companies of other states	12,994,065 93	21,475,230 07	161,751,384 21	3,720,206 57	13,040,524 83
Companies of foreign countries	11,860,225 23	10,022,935 63	69,393,090 37	1,518,561 14	8,658,187 68
Marine companies	5,798,680 81	17,065,479 76	52,101,078 63	1,023,588 67	6,271,070 46
Totals	\$31,275,971 97	\$48,929,137 96	\$287,756,474 21	\$6,739,906 38	\$28,982,601 67

	Interest Due and Accrued.	Premiums in Course of Collection.	Bills Receivable Not Matured.	All other Assets.	Total Assets.
California companies	\$5,152 95	\$841,636 96	\$51,538 42	\$25,413 82	\$7,269,833 67
Companies of other states	935,008 31	17,471,137 36	372,417 11	1,058,081 44	233,395,055 03
Companies of foreign countries	634,430 90	8,910,222 68	453,422 38	13,005,416 95	124,969,492 96
Marine companies	369,272 55	6,878,535 58	464,497 92	3,389,915 85	93,862,730 23
Totals	\$1,943,864 71	\$34,101,532 58	\$1,341,875 83	\$17,478,828 06	\$458,985,110 89

TABLE No. 47—RECAPITULATION.

Showing the various items composing the Liabilities of Fire and Marine Insurance Companies doing business in California on December 31, 1903.

	Losses Adjusted.	Losses Unadjusted.	Losses Resisted.	Fire Reinsurance.	Marine Reinsurance.	All Other Claims.	Total Liabilities.	Net Surplus.
California companies	\$77,331 39	\$214,332 48	\$9,900 00	\$2,783,798 58	\$252,288 91	\$111,860 96	\$7,269,833 67	\$2,512,816 84
Companies of other states	2,505,262 91	7,749,975 39	948,027 65	92,394,760 74	1,064,681 51	13,959,949 32	118,521,675 52	74,032,827 44
Companies of foreign countries	830,279 11	5,285,407 24	515,438 85	42,586,701 27	356,974 39	20,839,235 18	70,363,036 04	44,304,563 74
Marine companies	153,683 61	6,899,488 05	62,233 03	-----	7,234,019 85	19,533,847 76	34,005,493 50	39,710,098 43
Totals	\$3,566,557 02	\$20,149,203 16	\$1,535,599 53	\$137,715,260 59	\$8,906,964 66	\$54,444,893 22	\$230,160,038 73	\$160,560,306 45

TABLE No. 48—RECAPITULATION.

Showing the various items composing the Incomes of Fire and Marine Insurance Companies doing business in California on December 31, 1903.

	Fire Premiums.	Marine Premiums.	Interest on Mortgages.	Interest on Stocks and Bonds.	Rents.	All Other Sources.	Total Income.
California companies	\$3,673,752 81	\$584,817 28	\$25,657 24	\$213,582 09	\$30,228 16	\$8,007 09	\$4,536,044 67
Companies of other states	115,953,994 50	3,073,396 43	1,054,204 13	6,739,401 58	615,661 21	1,864,767 85	129,301,425 70
Companies of foreign countries	64,143,420 78	1,340,938 56	257,623 05	2,845,229 74	-----	2,594,492 02	71,187,704 09
Marine companies	-----	29,110,197 06	761,406 86	1,997,588 21	-----	4,920,540 42	36,789,732 55
Totals	\$183,777,163 09	\$34,109,349 33	\$2,098,891 28	\$11,795,801 62	\$645,889 37	\$9,387,807 38	\$241,814,907 01

TABLE No. 49—RECAPITULATION.

Showing the various items composing the Expenditures of Fire and Marine Insurance Companies doing business in California on December 31, 1903.

	Fire Losses.	Marine Losses.	Dividends.	Commissions and Brokerage.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures.
California companies	\$1,757,429 19	\$352,360 06	\$156,000 00	\$670,409 04	\$400,060 61	\$101,585 49	\$311,565 55	\$3,749,399 99
Companies of other states	55,507,342 07	3,913,567 88	5,857,248 06	24,810,960 74	7,504,777 20	2,986,247 50	2,291,570 03	108,448,083 93
Companies of foreign countries	32,609,375 03	1,047,914 18	1,528,587 74	12,834,111 66	5,231,038 16	1,379,489 77	6,326,422 18	61,723,477 72
Marine companies	-----	21,824,900 84	2,638,728 66	1,915,004 57	2,436,918 73	238,534 88	4,126,055 76	33,300,143 44
Totals	\$89,874,146 29	\$27,138,742 96	\$10,180,564 46	\$40,250,486 01	\$15,632,794 70	\$4,765,357 64	\$13,055,613 52	\$207,221,105 08

TABLE No. 50—RECAPITULATION.

Showing amount of Risks Written, Premiums Received, and Amount of Risks in Force December 31, 1903, with Premiums thereon, of Fire and Marine Insurance Companies doing business in California.

	RISKS WRITTEN DURING THE YEAR.			
	Fire.	Premiums.	Marine.	Total Premiums.
California companies.....	\$399,680,817 00	\$5,341,916 67	\$163,281,908 00	\$1,130,590 11
Companies of other states.....	13,171,160,845 65	156,664,668 35	841,975,058 00	4,748,536 69
Companies of foreign countries.....	14,552,662,044 89	89,636,569 19	388,321,255 00	2,123,604 12
Marine companies.....	-----	-----	7,536,352,360 00	32,678,029 18
Totals.....	\$28,123,503,707 54	\$251,643,154 21	\$8,929,930,681 00	\$40,680,760 10
				\$296,323,914 31
	RISKS IN FORCE DECEMBER 31, 1903.			
	Fire.	Premiums.	Marine.	Total Premiums.
California companies.....	\$411,914,083 00	\$5,389,901 44	\$8,065,225 00	\$266,423 70
Companies of other states.....	16,253,937,530 91	183,304,365 53	39,338,796 00	1,357,934 61
Companies of foreign countries.....	12,317,371,803 57	82,668,014 36	26,338,356 00	446,174 28
Marine companies.....	-----	-----	617,403,289 00	8,082,966 36
Totals.....	\$28,983,223,417 48	\$271,362,281 33	\$691,145,636 00	\$10,193,498 95
				\$281,557,626 28

TABLE NO. 51.

Showing the various items composing the Assets of Life Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Real Estate.	Loans on Mortgages.	Collateral Loans.	Premium Notes.	Stocks and Bonds.
Ætna Life.	Hartford.	\$620,945 24	\$29,894,208 23	\$1,181,769 19	\$359,858 60	\$25,485,877 63
Columbian National Life	Boston.	-----	52,000 00	8,125 00	500 00	187,506 00
Connecticut Mutual Life	Hartford.	11,251,610 60	24,836,415 06	30,000 00	577,521 21	26,339,693 75
Conservative Life	Los Angeles	260,743 09	7,500 00	-----	878,275 80	147,800 00
Equitable Life	New York	37,215,875 67	74,345,110 94	20,333,500 00	-----	193,146,945 00
Fidelity Mutual Life	Philadelphia	1,368,550 00	268,203 77	123,567 11	215,996 27	2,602,677 35
Germania Life.	New York	3,116,145 50	14,898,030 00	-----	-----	10,775,189 14
Hartford Life	Hartford	238,130 00	373,525 00	10,407 50	72,157 30	551,391 00
Home Life	New York	1,758,450 16	4,435,244 19	25,150 00	512,470 94	6,944,560 82
Life Association of America	New York	-----	25,000 00	68,400 00	1,049 13	128,700 00
Manhattan Life	New York	5,522,982 71	5,801,410 00	630,849 04	334,787 17	3,662,406 90
Massachusetts Mutual Life	Springfield, Mass.	398,872 15	14,148,092 97	-----	747,252 38	13,105,596 25
Metropolitan Life	New York	14,835,140 61	31,814,193 06	-----	675,496 70	48,175,913 27
Minnesota Mutual Life	St. Paul.	-----	92,150 00	-----	11,151 96	925,653 35
Mutual Benefit Life	Newark.	3,154,117 41	44,423,316 11	2,242,450 00	4,805,600 54	21,297,733 83
Mutual Life	New York	34,312,133 60	89,224,920 14	14,217,500 00	-----	214,713,238 37
National Life	Montpelier, Vermont.	1,435,144 13	11,424,871 22	22,000 00	995,492 59	9,733,205 00
New England Mutual Life	Boston.	2,409,642 50	10,020,275 00	1,320,940 00	196,659 36	18,503,051 00
New York Life	New York	12,725,000 00	24,531,774 34	5,280,000 00	3,139,284 12	247,994,383 06
Northwestern Mutual Life	Milwaukee	3,611,897 42	85,718,617 07	-----	312,311 54	67,468,362 43
Northwestern National Life	Minneapolis	56,123 43	1,742,355 00	42,980 00	-----	148,667 76
Pacific Mutual Life	San Francisco	430,046 51	1,215,746 23	257,350 00	31,851 77	3,454,375 00
Penn Mutual Life	Philadelphia	3,078,240 71	22,737,551 43	4,924,348 71	1,163,815 88	20,620,302 55
Phoenix Mutual Life	Hartford	723,167 31	9,968,748 15	-----	231,517 60	4,277,071 60
Provident Life and Trust	Philadelphia	3,308,976 23	14,134,993 54	5,192,390 67	8,032 24	22,672,820 00
Provident Savings Life	New York	2,200,000 00	5,312,544 00	8,500 00	220,281 32	796,096 89
Prudential	Newark.	12,063,757 29	13,138,291 49	5,761,775 00	286,129 29	29,400,535 50
Security Mutual Life	Binghamton, N. Y.	102,800 00	443,079 21	43,200 00	14,124 53	568,400 00
State Life	Indianapolis	3,351 24	1,353,376 98	13,100 00	35,542 03	-----
Travelers Life	Hartford	790,138 54	8,079,606 06	990,737,20	7,910 03	17,796,580 64
Union Central Life	Cincinnati	495,471 81	31,054,239 43	-----	1,418,221 79	10,775 00
Union Mutual Life	Portland, Maine	1,282,002 93	1,151,622 22	647,056 11	148,229 11	6,382,633 47
Washington Life	New York	6,518,739 75	7,768,750 00	28,000 00	-----	369,705 58
Totals	-----	\$165,288,196 54	\$579,646,342 28	\$63,404,095 53	\$17,401,821 77	\$1,018,387,848 14

TABLE No. 51.—CONTINUED.

Name.	Location.	Cash in Office and Banks.	Interest Due and Accrued.	Net Uncollected Premiums.	All Other Assets.	Total Assets.
Etna Life.....	Hartford.....	\$6,089,458 63	\$853,096 18	\$635,392 81	\$2,947,256 14	\$68,067,862 65
Columbian National Life.....	Boston.....	218,651 51	2,906 81	66,677 53	.....	537,366 85
Connecticut Mutual Life.....	Hartford.....	608,928 69	916,909 54	358,732 44	13,143 55	64,932,954 84
Conservative Life.....	Los Angeles.....	101,158 98	897 64	147,347 00	2,395 62	1,346,048 13
Equitable Life.....	New York.....	25,625,769 16	2,389,881 70	7,662,637 00	18,985,070 11	379,704,789 58
Fidelity Mutual Life.....	Philadelphia.....	304,669 89	34,177 22	411,574 41	561,196 28	5,890,612 30
Germania Life.....	New York.....	883,046 47	348,075 46	636,977 56	1,838,651 56	32,476,115 69
Hartford Life.....	Hartford.....	525,773 31	14,178 86	343,063 48	1,169,892 50	3,298,518 45
Home Life.....	New York.....	254,149 67	72,149 25	249,331 82	851,333 75	15,102,840 60
Life Association of America.....	New York.....	145,426 59	2,523 95	6,435 56	.....	377,735 23
Manhattan Life.....	New York.....	270,040 15	141,707 48	267,185 71	1,056,235 45	17,687,004 61
Massachusetts Mutual Life.....	Springfield, Mass.....	703,522 21	467,418 75	786,683 18	3,233,561 50	33,590,999 39
Metropolitan Life.....	New York.....	5,301,220 90	670,630 19	3,000,401 30	1,183,316 10	105,656,311 60
Minnesota Mutual Life.....	St. Paul.....	27,256 71	25,455 85	65,956 21	652,722 96	1,800,347 04
Mutual Benefit Life.....	Newark.....	1,039,890 40	1,481,698 00	1,012,358 18	7,939,084 40	87,396,248 87
National Life.....	New York.....	22,460,550 02	2,797,351 42	5,032,889 14	19,063,078 97	401,821,061 66
New England Mutual Life.....	Montpelier, Vt.....	825,198 78	472,096 00	612,721 05	2,857,738 48	28,378,467 25
New York Life.....	Boston.....	438,817 45	190,436 43	634,503 73	2,069,665 03	35,781,010 50
Northwestern Mutual Life.....	New York.....	22,126,134 05	2,150,172 48	6,167,726 98	28,537,572 54	352,652,047 57
Northwestern National Life.....	Milwaukee.....	2,466,819 84	2,586,671 79	2,252,755 52	13,783,189 59	178,200,625 20
Pacific Mutual Life.....	Minneapolis.....	124,907 92	48,367 74	270,995 20	2,765,237 42	5,199,034 47
Penn Mutual Life.....	San Francisco.....	170,248 83	80,485 59	326,767 34	418,541 63	6,385,412 90
Phoenix Mutual Life.....	Philadelphia.....	991,276 89	518,518 90	1,636,613 42	5,125,291 09	60,785,959 58
Provident Life and Trust.....	Hartford.....	455,921 37	201,218 85	289,585 95	17,011,161 93	17,011,161 93
Provident Savings Life.....	Philadelphia.....	160,497 02	296,890 93	882,633 19	4,444,228 16	51,151,861 98
Prudential.....	New York.....	433,957 45	74,203 75	545,842 00	2,183,135 41	7,045,142 26
Security Mutual Life.....	Newark.....	7,610,148 22	470,743 56	2,317,333 77	1,384,745 68	72,384,759 80
State Life.....	Binghamton, N. Y.....	169,653 80	28,426 17	134,222 80	584,963 50	1,988,870 01
Travelers Life.....	Indianapolis.....	187,242 16	19,328 83	173,619 25	419,475 37	2,205,035 86
Union Central Life.....	Hartford.....	1,108,632 30	268,423 77	739,497 83	2,415,925 00	32,197,451 37
Union Mutual Life.....	Cincinnati.....	394,830 91	1,241,899 38	574,298 74	3,431,706 33	38,021,473 39
Washington Life.....	Portland, Maine.....	181,861 74	68,794 10	209,863 40	124,296 27	10,196,259 35
	New York.....	426,073 09	111,438 91	250,698 62	1,490,479 70	16,993,885 65
Totals.....		\$102,811,735 11	\$19,048,795 48	\$38,703,522 12	\$132,358,120 09	\$2,137,050,477 06

TABLE No. 52.—Showing the various items composing the Liabilities, Capital Stock not included, of Life Insurance Companies doing business in California on December 31, 1903.

Name	Location.	Losses and Matured Endowments Adjusted and in Process of Adjustment.	Losses Resisted.	Net Value of Outstanding Policies.	Unpaid Dividends Due Policy Holders.	All other Liabilities.	Total Liabilities.	Surplus as Regards Policy Holders.
Aetna Life	Hartford	\$198,275 00	\$24,000 00	\$57,586,021 00	\$86,506 12	\$4,501,303 88	\$62,396,106 10	\$5,671,756 55
Columbian National Life	Boston	2,458 81		210,673 00		5,139 84	218,270 65	319,096 20
Connecticut Mutual Life	Hartford	487,469 93	3,500 00	57,913,312 00	1,352,028 05	546,831 31	60,303,142 29	4,629,812 29
Conservative Life	Los Angeles	13,839 32		1,214,453 08			1,228,292 40	317,755 73
Equitable Life	New York	2,217,667 76	27,500 00	3,034,557,838 00	456,687 08	1,712,204 66	307,871,589 58	71,832,892 08
Fidelity Mutual Life	Philadelphia	71,443 90	4,000 00	4,797,390 00	799 64	198,916 34	5,072,497 98	818,062 42
Germania Life	New York	161,175 86	3,500 00	27,628,440 00	42,074 54	134,253 65	27,969,444 05	4,506,671 64
Hartford Life	Hartford	244,949 80	6,000 00	691,910 00	18,810 35	1,449,099 88	2,410,769 53	887,749 42
Home Life	New York	38,619 19	3,000 00	13,886,872 00	5,970 68	31,609 00	13,976 07 87	1,126,769 73
Life Association of America.	New York	5,000 00	10,000 00	57,755 00		2,887 91	75,642 91	302,092 32
Manhattan Life	New York	29,836 19	11,000 00	15,825,508 00	18,262 88	43,187 31	15,927,794 38	1,759,810 23
Massachusetts Mutual Life	Springfield	58,404 00	1,500 00	30,314,692 00	312,472 17	256,439 84	30,943,508 01	2,647,491 88
Metropolitan Life	New York	311,182 81	55,147 50	92,830,919 00	47,230 95	1,719,958 78	94,984,439 04	10,691,872 56
Minnesota Mutual Life	St. Paul	28,000 00	7,000 00	1,519,609 55		19,825 71	1,574,435 26	225,911 78
Mutual Benefit Life	Newark	510,431 98	5,295 00	78,524,265 00	283,703 11	1,424,351 82	80,748,046 91	6,648,201 96
National Life	New York	1,980,935 53	96,665 00	336,246,040 00	131,045 51	60,536,975 62	398,991,661 66	2,830,000 00
Northwestern Mutual Life	Montpelier, Vt.	63,935 44	50,000 00	24,805,942 95	10,226 76	501,404 88	25,431,510 03	2,946,957 22
New England Mutual Life	Boston	321,486 00	5,500 00	31,949,483 81	212,647 93	80,288 97	32,569,406 71	3,214,603 79
New York Life	New York	2,575,473 11	4,000 00	300,090,347 00	350,960 64	2,525,220 20	305,547,000 95	47,105,046 62
Northwestern Mutual Life	Milwaukee	615,904 52	40,900 00	145,035,854 00	284,304 87	26,608,897 91	172,585,861 30	5,614,763 90
Northwestern National Life	Minneapolis	92,569 49	17,390 00	4,552,159 17		171,020 23	4,833,168 89	366,465 58
Pacific Mutual Life	San Francisco.	33,065 18	7,995 00	5,221,939 94		285,511 85	5,548,511 97	836,900 93
Penn Mutual Life	Philadelphia	227,306 25	90,000 00	51,285,859 00	124,422 39	5,769,534 07	57,467,121 71	3,318,837 87
Phoenix Mutual Life	Hartford	55,117 48		16,016,501 00		223,839 07	16,295,457 48	715,704 45
Provident Life and Trust	Philadelphia	147,336 21		43,440,756 00	73,077 58	854,771 94	44,515,941 73	6,635,620 25
Provident Savings Life	New York	97,816 00	54,072 00	6,011,423 00	2,456 23	146,289 50	6,312,056 73	733,085 53
Prudential	Newark	396,882 24	52,796 93	61,130,614 00	44,386 41	576,682 05	62,201,361 63	10,193,398 17
Security Mutual Life	Birmingham	28,253 00	3,000 00	1,284,578 00		86,324 94	1,397,165 94	591,714 07
State Life	Indianapolis	37,500 00	10,000 00	1,759,657 00	1,006 74	6,895 14	1,815,058 88	390,576 98
Travelers Life	Hartford	79,155 51	3,000 00	29,027,948 00		1,744,726 06	30,854,829 57	1,342,621 80
Union Central Life	Cincinnati	66,023 00	39,000 00	31,999,244 00	21,024 64	471,207 86	32,596,499 50	6,024,973 89
Union Mutual Life	Portland, Me.	90,507 69	3,500 00	9,508,437 00	5,334 23	33,382 52	9,641,161 44	555,197 91
Washington Life	New York	143,147 63		16,173,047 00		8,531 30	16,324,725 93	693,159 72
Totals		\$11,426,198 83	\$640,261 43	\$1,801,979,488 50	\$3,885,439 50	\$112,677,513 57	\$1,930,608,901 83	\$206,441,575 23

TABLE No. 53.
Showing the various items composing the Income of Life Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Premiums.	Interest.	Rents.	All Other Sources.	Total Income.
Etna Life.	Hartford.	\$8,896,452 83	\$2,766,362 83	\$46,335 83	\$2,849,723 57	\$14,558,874 56
Columbia National Life.	Boston.	251,156 47	12,284 54		118,589 13	382,030 14
Connecticut Mutual Life.	Hartford.	5,325,082 06	2,404,603 60	531,940 25	545 38	8,262,171 29
Conservative Life.	Los Angeles.	722,382 68	47,658 25	23,910 87	44,623 58	838,575 38
Equitable Life.	New York.	58,637,889 63	12,936,856 56	1,881,000 96	263,603 78	73,718,350 93
Fidelity Mutual Life.	Philadelphia.	3,145,652 32	188,674 58	83,594 21	2,943 49	3,420,864 60
Germania Life.	New York.	4,169,714 83	1,220,722 02	239,494 55	26,464 36	5,656,395 76
Hartford Life.	Hartford.	2,397,397 93	88,481 72	13,177 49	34,354 16	2,533,411 30
Home Life.	New York.	2,747,783 03	571,157 64	103,153 19	13,435 00	3,435,528 86
Life Association of America.	New York.	51,633 41	4,281 53		154,119 32	210,034 26
Manhattan Life.	New York.	2,459,224 05	606,327 49	251,879 77	4,075 39	3,321,506 70
Massachusetts Mutual Life.	Springfield, Mass.	5,995,862 90	1,380,710 65	13,786 25	262,837 57	7,653,197 37
Metropolitan Life.	New York.	45,656,960 57	3,462,684 09	656,195 22	111,964 23	49,887,804 11
Minnesota Mutual Life.	St Paul.	536,044 70	72,766 12		9,193 59	618,004 41
Mutual Benefit Life.	Newark.	12,672,873 35	3,714,328 75	200,336 99	16,640 04	16,604,179 13
Mutual Life.	New York.	60,151,019 66	14,625,367 97	1,584,776 31	972,608 82	77,333,712 76
National Life.	Montpelier, Vt.	5,224,447 87	1,128,363 24	122,962 25	2,049 98	6,477,823 34
New England Mutual Life.	Boston.	4,932,087 68	1,360,517 14	184,603 01	6,301 55	6,483,509 38
New York Life.	New York.	73,332,174 10	13,370,363 57	930,947 39	586,046 35	88,269,531 41
Northwestern Mutual Life.	Milwaukee.	26,155,649 60	7,010,017 44	434,731 48	234,875 14	33,835,273 66
Northwestern National Life.	Minneapolis.	1,094,395 13	183,998 17	1,149 57	1,618,739 63	2,897,382 50
Pacific Mutual Life.	San Francisco.	1,767,054 28	248,593 70	21,432 78	594,914 15	2,631,994 91
Penn Mutual Life.	Hartford.	11,848,666 89	2,542,427 34	196,869 08	252,755 19	14,840,718 50
Phoenix Mutual Life.	Philadelphia.	2,969,605 94	750,893 52	35,842 59	26,533 98	3,782,876 03
Provident Life and Trust.	Philadelphia.	6,391,882 09	2,081,973 71	214,655 82	162,027 88	8,757,106 56
Provident Savings Life.	New York.	3,646,220 86	1,931,684 06	121,222 88	150,521 47	4,203,081 91
Prudential.	Newark.	36,028,402 20	2,088,561 46	773,357 36	134,807 23	39,025,128 25
Security Mutual Life.	Binghamton, N. Y.	1,211,808 34	47,644 65	4,975 22	567,050 11	1,831,478 32
State Life.	Indianapolis.	1,665,922 91	82,305 42		261 94	1,748,490 27
Travelers' Life.	Hartford.	4,303,999 65	1,357,963 32	74,615 26	485,057 59	6,221,635 82
Union Central Life.	Cincinnati.	6,067,073 27	2,090,826 78	21,468 48	25,602 32	8,804,970 85
Union Mutual Life.	Portland, Me.	1,978,288 65	344,125 89	56,002 76	7,611 83	2,386,027 13
Washington Life.	New York.	2,789,089 08	512,555 79	374,285 50	325 44	3,676,255 81
Totals.		\$405,873,898 96	\$79,496,121 54	\$9,199,302 52	\$9,741,203 19	\$504,310,526 21

TABLE No. 54.

Showing the various items composing the Expenditures of Life Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Losses and Matured Endowments.	Surrendered Policies.	Dividends to Policy Holders.	Dividends to Stockholders.	Commissions.
Etna Life.	Hartford	\$4,433,100 92	\$491,654 57	\$679,155 94	\$193,750 00	\$1,014,900 91
Columbian National Life	Boston	19,773 00				52,507 51
Connecticut Mutual Life	Hartford	4,696,075 85	578,880 99	1,359,811 44		399,220 84
Conservative Life	Los Angeles	119,000 00	7,839 01	77 28	18,000 00	209,456 57
Equitable Life	New York	20,949,979 68	7,434,119 04	5,682,295 55	7,000 00	8,288,405 22
Fidelity Mutual Life	Philadelphia	997,835 60	56,173 39	45,320 49		496,464 39
Germania Life	New York	2,007,684 30	333,137 39	197,558 64	24,000 00	531,139 03
Hartford Life	Hartford	1,578,132 33	4,239 69	65,372 15	40,000 00	419,171 62
Home Life	New York	1,133,832 66	151,932 13	230,750 14	15,000 00	386,954 20
Life Association of America.	New York	3,000 00				10,469 15
Manhattan Life	New York	1,437,859 67	237,656 22	76,983 48	16,000 00	389,330 67
Massachusetts Mutual Life	Springfield, Mass.	2,010,062 00	506,883 73	881,402 82		684,430 25
Metropolitan Life	New York	13,004,439 60	478,156 43	603,255 28	140,000 00	8,466,967 66
Minnesota Mutual Life	St. Paul	216,473 00	20,218 81	86,395 58		103,325 41
Mutual Benefit Life	Newark	6,024,960 88	1,317,037 51	1,837,243 12		1,283,324 65
Mutual Life	New York	23,576,194 26	3,963,060 88	2,994,643 12		8,421,225 79
National Life	Montpelier, Vt.	1,230,072 34	570,973 90	162,724 16		715,074 20
New England Mutual Life	Boston	2,478,159 73	484,625 87	543,167 18		587,488 61
New York Life	New York	21,166,023 06	6,412,235 60	5,339,292 23		9,696,673 03
Northwestern Mutual Life	Milwaukee	8,133,547 29	2,460,634 65	4,456,172 04		2,928,173 34
Northwestern National Life	Minneapolis	405,651 80	88,128 84	12,407 95		371,995 64
Pacific Mutual Life	San Francisco	432,516 10	122,694 68	127,998 95	35,000 00	484,350 83
Penn Mutual Life	Philadelphia	3,579,285 00	835,818 16	785,330 89		1,491,566 90
Phoenix Mutual Life	Hartford	1,184,658 67	233,787 23	265,365 32		376,156 96
Provident Life and Trust	Philadelphia	3,169,967 44	522,705 85	818,024 43		581,829 20
Provident Savings Life	New York	1,373,132 40	236,970 61	138,706 33	6,972 00	595,301 04
Prudential	Newark	9,842,693 25	882,689 89	780,479 64	200,000 00	7,254,024 08
Security Mutual Life	Binghamton, N. Y.	384,563 96	22,518 37	4,585 00		315,211 40
State Life	Indianapolis	238,288 16	73,757 55	40,216 09		448,375 76
Travelers' Life	Hartford	2,092,505 21	186,589 66			481,104 67
Union Central Life	Cincinnati	1,801,421 47	217,109 91	449,866 11	10,000 00	874,911 45
Union Mutual Life	Portland, Me.	772,292 84	93,193 10	73,890 75		292,359 85
Washington Life	New York	1,869,155 96	221,367 70	156,450 57	8,750 00	380,909 31
Totals		\$142,362,358 43	\$29,266,791 36	\$28,900,642 67	\$714,472 00	\$58,966,500 14

TABLE No. 54—CONTINUED.

Name.	Location.	Salaries.	Medical Examiners' Fees.	All Other Payments.	Total Expenditures.
Etna Life	Hartford	\$186,961 91	\$95,782 03	\$2,770,696 91	\$9,866,003 19
Columbian National Life	Boston	27,974 60	13,230 75	39,337 84	152,823 70
Connecticut Mutual Life	Hartford	166,363 53	22,131 40	1,010,949 67	8,233,433 72
Conservative Life	Los Angeles	46,143 15	23,539 34	236,861 72	660,920 07
Equitable Life	New York	1,088,968 22	830,956 23	5,211,287 21	49,493,011 15
Fidelity Mutual Life	Philadelphia	161,716 41	67,290 61	411,685 44	2,236,486 33
Germania Life	New York	108,365 53	48,653 56	615,708 54	3,866,246 99
Hartford Life	Hartford	95,459 78	35,702 47	144,897 54	2,382,975 58
Home Life	New York	113,642 75	37,138 48	360,402 28	2,429,652 64
Life Association of America	New York	5,176 57	1,241 55	8,534 28	28,421 55
Manhattan Life	New York	97,574 54	43,197 96	524,924 03	2,823,526 57
Massachusetts Mutual Life	Springfield, Mass.	158,519 48	57,806 78	552,073 16	4,851,178 22
Metropolitan Life	New York	1,803,427 51	780,411 05	6,503,236 65	31,779,894 18
Minnesota Mutual Life	St. Paul	45,427 42	5,788 31	130,216 80	607,845 33
Mutual Benefit Life	Newark	295,564 32	135,495 93	1,033,906 51	11,927,532 92
Mutual Life	New York	953,916 59	788,911 86	8,109,653 49	48,807,615 99
National Life	Boston	120,872 63	58,814 98	527,844 32	3,386,376 53
New England Mutual Life	New York	806,335 13	912,421 72	448,840 66	4,781,805 30
Northwestern Mutual Life	Milwaukee	176,151 42	57,371 83	8,550,478 68	52,883,439 45
Northwestern National Life	Minneapolis	481,882 42	170,822 51	2,405,312 90	21,036,545 15
Pacific Mutual Life	San Francisco	74,733 67	15,682 32	591,354 79	1,559,955 01
Penn Mutual Life	Philadelphia	250,703 25	33,111 50	653,016 16	1,898,845 07
Phoenix Mutual Life	Hartford	279,857 99	133,722 89	1,093,161 99	8,169,589 08
Provident Life and Trust	Philadelphia	92,208 96	44,014 17	299,619 50	2,515,810 81
Provident Savings Life	New York	250,268 85	79,607 89	578,537 75	5,980,637 41
Prudential	Newark	1,232,079 95	584,019 21	672,689 01	3,353,668 13
Security Mutual Life	Binghamton, N. Y.	57,768 12	32,171 26	5,873,138 21	26,649,124 23
State Life	Indianapolis	89,972 59	34,239 80	233,181 88	1,069,969 99
Travelers' Life	Hartford	80,560 71	34,239 80	168,883 50	1,093,583 45
Union Central Life	Cincinnati	144,444 72	49,009 94	406,687 32	3,296,457 51
Union Mutual Life	Portland, Me.	73,432 27	58,017 70	758,435 52	4,314,206 88
Washington Life	New York	120,724 54	33,432 00	353,492 92	1,693,803 73
Totals		\$9,759,363 38	\$5,391,467 71	\$51,903,994 90	\$327,265,593 59

TABLE No. 55. — Showing the Number and Amount of Policies, including additions, in force at the end of the previous year, and an Exhibit of the Policies Issued during the year, by Life Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	POLICIES IN FORCE DECEMBER 31, 1902.		POLICIES ISSUED AND REVIVED DURING THE YEAR.		TOTAL.	
		Number.	Amount.	Number.	Amount.	Number.	Amount.
Ætna Life	Hartford	124,202	\$213,762,977 00	17,822	\$33,087,131 00	142,024	\$246,850,108 00
Columbian National Life	Boston	*4,710	1,895,066 00	36,126	11,876,991 00	40,836	13,772,057 00
Connecticut Mutual Life	Hartford	69,752	165,858,225 00	3,829	10,144,438 00	73,581	176,002,663 00
Conservative Life	Los Angeles	5,317	11,174,547 00	7,115	17,727,664 00	12,432	28,902,211 00
Equitable Life	New York	457,905	1,292,446,593 00	121,776	322,047,968 00	579,681	1,614,494,563 00
Fidelity Mutual Life	Philadelphia	43,664	90,097,572 00	12,970	24,593,096 00	56,634	114,690,668 00
Germania Life	New York	55,364	93,316,246 00	9,528	17,194,134 00	64,892	110,510,430 00
Hartford Life	Hartford	40,251	71,758,395 00	7,289	12,849,447 00	47,540	84,607,842 00
Home Life	New York	34,619	63,313,144 00	6,983	12,335,472 00	41,602	75,648,616 00
Life Association of America	New York	---	---	1,368	5,011,500 00	1,368	5,011,500 00
Manhattan Life	New York	30,297	67,519,305 00	6,461	16,913,364 00	36,758	84,432,669 00
Massachusetts Mutual Life	Springfield, Mass.	67,508	158,703,802 00	11,814	24,677,440 00	79,322	183,381,242 00
Metropolitan Life	New York	*6,976,651	1,219,166,427 00	1,926,745	398,889,074 00	8,903,396	1,618,055,501 00
Minnesota Mutual Life	St. Paul.	5,456	14,189,235 00	7,410	3,479,831 00	6,666	17,669,066 00
Mutual Benefit Life	Newark	130,145	314,256,081 00	22,846	47,943,126 00	152,991	362,199,207 00
Mutual Life	New York	543,194	1,340,748,659 00	98,878	215,677,774 00	642,072	1,556,326,433 00
National Life	Montpelier, Vt.	58,788	118,301,698 00	11,387	20,822,389 00	70,175	139,124,087 00
New England Mutual Life	Boston	52,881	135,256,636 00	10,189	22,536,288 00	63,070	157,792,924 00
New York Life	New York	704,567	1,583,628,026 00	172,652	329,875,034 00	877,219	1,883,503,060 00
Northwestern Mutual Life	Milwaukee	262,094	620,681,283 00	34,095	80,358,422 00	296,189	701,036,705 00
Northwestern National Life	Minneapolis	26,485	36,700,568 00	26,224	15,573,794 00	52,709	52,274,362 00
Pacific Mutual Life	San Francisco	+24,121	40,842,473 00	13,321	16,719,704 00	37,442	57,562,177 00
Penn Mutual Life	Philadelphia	114,831	276,110,015 00	29,548	63,728,754 00	144,379	340,838,769 00
Phoenix Mutual Life	Hartford	42,712	70,864,592 00	8,284	14,364,393 00	50,996	85,228,985 00
Provident Life and Trust	Philadelphia	53,141	151,149,235 00	7,342	19,310,842 00	60,483	170,460,077 00
Provident Savings Life	New York	40,228	98,159,633 00	19,091	34,364,047 00	59,319	132,523,680 00
Prudential	Newark	*4,907,191	802,627,839 00	1,563,117	293,208,942 00	6,470,308	1,095,836,781 00
Security Mutual Life.	Binghamton, N. Y.	13,594	36,336,866 00	10,918	17,175,560 00	30,512	53,512,426 00
State Life	Indianapolis	13,227	39,531,688 00	10,308	25,623,486 00	23,535	65,165,174 00
Travelers' Life	Hartford	123,160	123,160,821 00	7,326	17,077,675 00	130,486	140,238,496 00
Union Central Life	Cincinnati	98,865	182,546,305 00	18,752	35,925,129 00	118,627	218,471,434 00
Union Mutual Life	Portland, Me.	36,678	54,118,625 00	6,199	8,484,449 00	42,877	62,603,074 00
Washington Life.	New York	31,882	61,030,887 00	9,881	19,443,692 00	41,763	80,479,579 00
Totals		15,127,248	9,518,663,516 00	4,251,404	\$2,214,943,050 00	19,378,652	\$11,733,606,566 00

* Includes Industrial. † Includes Intermediate.

TABLE No. 56.—Showing the Number and Amount of Policies which have ceased to be in force during the year, with the mode of their termination, of Life Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	BY DEATH.		BY EXPIRATION AND MATURITY.		BY SURRENDER.	
		Number.	Amount.	Number.	Amount.	Number.	Amount.
Etna Life.....	Hartford.....	1,673	\$2,317,461 00	1,381	\$1,926,996 00	1,258	\$2,465,408 00
Columbian National Life.....	Boston.....	*171	24,560 00			19	4,152 00
Connecticut Mutual Life.....	Hartford.....	1,759	4,564,107 00	145	359,537 00	621	1,669,371 00
Conservative Life.....	Los Angeles.....	76	123,000 00			35	100,000 00
Equitable Life.....	New York.....	5,172	18,359,764 00	4,090	14,064,113 00	7,680	28,633,283 00
Fidelity Mutual Life.....	Philadelphia.....	478	1,029,722 00	131	327,635 00	96	169,570 00
Germania Life.....	New York.....	690	1,226,654 00	642	939,870 00	781	1,283,371 00
Hartford Life.....	Hartford.....	761	1,590,442 00			22	44,212 00
Home Life.....	New York.....	399	825,787 00	216	387,668 00	416	767,922 00
Life Association of America.....	New York.....						
Manhattan Life.....	New York.....	488	1,173,217 00	137	425,153 00	540	949,414 00
Massachusetts Mutual Life.....	Springfield, Mass.....	624	1,705,024 00	121	291,260 00	1,178	2,282,744 00
Metropolitan Life.....	New York.....	*109,094	12,907,617 00	427	220,086 00	59,609	12,825,979 00
Minnesota Mutual Life.....	St. Paul.....	87	225,642 00	5	14,915 00	2	4,000 00
Mutual Benefit Life.....	Newark.....	1,711	4,975,339 00	1,560	3,528,908 00	2,065	4,931,865 00
Mutual Life.....	New York.....	6,314	19,349,488 00	2,174	6,876,270 00	5,938	15,492,944 00
National Life.....	Montpelier, Vt.....	410	1,003,559 00	508	934,496 00	1,278	2,514,506 00
New England Mutual Life.....	Boston.....	673	2,196,784 00	170	502,767 00	851	2,121,515 00
New York Life.....	New York.....	6,482	16,370,848 00	43,982	78,714,457 00	11,134	27,496,208 00
Northwestern Mutual Life.....	Milwaukee.....	2,373	6,285,334 00	895	3,618,118 00	3,272	7,117,380 00
Northwestern National Life.....	Minneapolis.....	333	435,326 00	262	445,500 00	471	588,992 00
Pacific Mutual Life.....	San Francisco.....	+202	389,175 00	21	48,341 00	215	449,367 00
Penn Mutual Life.....	Philadelphia.....	1,086	2,792,129 00	764	1,846,955 00	1,458	3,644,464 00
Phoenix Mutual Life.....	Hartford.....	594	1,074,960 00	194	321,900 00	636	1,135,384 00
Provident Life and Trust.....	Philadelphia.....	446	1,704,692 00	536	1,513,504 00	682	2,245,080 00
Provident Savings Life.....	New York.....	499	1,338,621 00	6,813	15,351,687 00	337	950,404 00
Prudential.....	Newark.....	*74,260	10,298,444 00	9,546	12,950,269 00	35,318	8,189,311 00
Security Mutual Life.....	Binghamton, N. Y.....	175	374,038 00			66	138,874 00
State Life.....	Indianapolis.....	90	270,902 00	1,445	2,499,000 00	369	1,444,251 00
Travelers' Life.....	Hartford.....	606	1,653,691 00	441	985,883 00	541	1,488,686 00
Union Central Life.....	Cincinnati.....	688	1,403,489 00	552	1,071,817 00	414	1,025,739 00
Union Mutual Life.....	Portland, Me.....	337	605,203 00	575	916,306 00	303	499,901 00
Washington Life.....	New York.....	431	977,083 00	730	1,459,129 00	451	1,010,453 00
Totals.....		219,152	\$120,572,072 00	78,463	\$152,515,540 00	138,036	\$133,484,950 00

* Includes Industrial. † Includes Intermediate.

TABLE No. 56—CONTINUED.

Name.	Location.	BY LAISE.		BY CHANGE AND DECREASE, AND NOT TAKEN.	
		Number.	Amount.	Number.	Amount.
Etna Life.....	Hartford.....	*3,777	\$7,324,652 00	2,679	\$6,749,748 00
Columbian National Life.....	Boston.....	19,086	3,093,586 00	501	1,264,600 00
Connecticut Mutual Life.....	Hartford.....	716	1,793,010 00	190	1,112,152 00
Conservative Life.....	Los Angeles.....	867	1,866,905 00	1,598	4,968,616 00
Equitable Life.....	New York.....	26,206	58,322,822 00	22,568	85,195,839 00
Fidelity Mutual Life.....	Philadelphia.....	5,409	10,437,889 00	821	2,385,305 00
Germania Life.....	New York.....	2,301	3,638,095 00	1,434	2,920,835 00
Hartford Life.....	Hartford.....	5,099	7,472,212 00	1,079	2,214,429 00
Home Life.....	New York.....	2,466	3,967,345 00	---	289,312 00
Life Association of America.....	New York.....	51	205,000 00	25	108,600 00
Manhattan Life.....	New York.....	1,856	5,321,280 00	1,068	3,921,618 00
Massachusetts Mutual Life.....	Springfield, Mass.....	2,443	4,544,958 00	1,754	4,888,800 00
Metropolitan Life.....	New York.....	*1,182,504	231,318,096 00	27,847	18,402,266 00
Minnesota Mutual Life.....	St. Paul.....	370	819,723 00	152	397,060 00
Mutual Benefit Life.....	Newark.....	2,525	3,849,595 00	3,626	7,449,939 00
Mutual Life.....	New York.....	28,661	62,012,378 00	13	7,366,672 00
National Life.....	Montpelier, Vt.....	2,469	5,723,023 00	1,550	3,255,725 00
New England Mutual Life.....	Boston.....	1,519	3,241,149 00	1,545	4,350,837 00
New York Life.....	New York.....	2,920	7,095,544 00	---	8,203,104 00
Northwestern Mutual Life.....	Milwaukee.....	5,611	10,992,355 00	3,618	10,058,314 00
Northwestern National Life.....	Minneapolis.....	6,873	9,667,384 00	---	1,481,795 00
Pacific Mutual Life.....	San Francisco.....	*5,063	5,323,642 00	1,755	2,678,042 00
Penn Mutual Life.....	Philadelphia.....	6,797	13,767,774 00	4,957	15,001,355 00
Phoenix Mutual Life.....	Hartford.....	1,630	2,585,621 00	1,865	3,448,053 00
Provident Life and Trust.....	Philadelphia.....	1,524	4,170,922 00	251	1,277,444 00
Provident Savings Life.....	New York.....	3,356	2,619,127 00	4,973	7,125,806 00
Prudential.....	Newark.....	*897,909	132,118,238 00	5,908	421,706 00
Security Mutual Life.....	Binghamton, N. Y.....	4,597	4,439,249 00	3,603	6,173,481 00
State Life.....	Indianapolis.....	1,094	2,985,155 00	3,290	8,252,070 00
Travelers' Life.....	Hartford.....	1,711	3,306,576 00	---	69,248 00
Union Central Life.....	Cincinnati.....	5,240	9,903,870 00	3,119	8,025,620 00
Union Mutual Life.....	Portland, Me.....	2,835	3,084,434 00	---	112,032 00
Washington Life.....	New York.....	4,227	8,881,747 00	1,273	2,682,328 00
Totals.....	---	2,239,712	\$635,903,356 00	103,122	\$232,252,651 00

* Includes Industrial. † Includes Intermediate.

TABLE No. 57.

Summary of Assets, Liabilities, Incomes, Expenditures, etc., of Miscellaneous Companies doing business in California on December 31, 1903.

Name.	Location.	Capital Paid Up.	Assets.	Liabilities.	Incomes.	Expenditures.	Losses Incurred During the Year.	Net Surplus.
Etna Indemnity.	Hartford.	\$713,100 00	\$926,907 77	\$191,015 70	\$344,719 31	\$337,765 99	\$58,439 51	\$22,792 07
American Bonding	Baltimore.	1,000,000 00	2,142,831 12	1,009,583 91	845,157 18	866,298 55	344,123 68	133,247 21
American Credit Indemnity.	New York.	1,000,000 00	2,129,567 93	1,015,407 08	1,850,361 39	1,725,752 31	778,405 70	114,160 85
American Surety	New York.	2,500,000 00	5,627,954 61	1,128,665 09	1,627,977 91	1,451,206 45	1,045,752 27	1,999,299 52
California Title Ins. and Trust.	San Francisco.	500,000 00	790,341 76	148,474 10	109,791 64	191,680 73	762 15	111,867 66
City Trust Safe Deposit and Surety.	Philadelphia.	500,000 00	3,156,425 81	2,457,191 95	332,138 69	386,902 80	1,208,418 93	199,243 86
Continental Casualty*.	Hammond, Ind.	300,000 00	1,344,208 79	925,313 38	1,857,162 25	1,750,312 74	895,314 33	118,895 41
Employers Liability.	London.	---	2,270,655 22	1,556,926 94	2,293,387 10	1,972,252 36	1,130,728 28	713,728 28
Fidelity and Casualty.	New York.	500,000 00	5,792,353 75	4,128,560 44	5,284,364 38	4,473,198 35	1,813,758 72	1,103,793 31
Fidelity and Deposit.	Baltimore.	2,000,000 00	5,787,267 22	990,040 09	1,556,615 62	1,516,158 64	469,871 22	2,757,227 13
Frankfort Marine, Accident and Plate Glass*.	Frankfort, Ger.	200,000 00	1,226,757 03	864,488 61	1,219,508 32	1,103,500 70	638,738 53	162,268 42
Hartford Steam Boiler.	Hartford.	500,000 00	3,122,165 10	1,904,287 45	1,464,313 63	1,313,142 87	88,323 60	717,877 65
Lloyds Plate Glass.	New York.	250,000 00	751,201 18	253,435 55	462,689 17	413,221 34	---	247,765 63
London Guarantee & Accident*.	London.	---	1,478,902 35	1,028,006 10	1,233,862 19	1,116,767 11	---	450,896 25
Maryland Casualty.	Baltimore.	750,000 00	2,958,821 77	1,355,428 69	361,448 01	388,717 10	895,351 34	823,393 08
Metropolitan Plate Glass.	New York.	200,000 00	566,903 24	182,463 14	2,054,357 38	1,889,598 88	114,976 92	184,440 10
National Surety.	New York.	314,400 00	1,611,555 71	859,588 38	912,855 70	789,290 27	280,824 92	221,966 83
New Amsterdam Casualty.	New York.	---	695,479 13	305,720 49	473,174 63	396,323 03	218,213 66	75,358 64
New York Plate Glass.	New York.	100,000 00	572,184 24	240,906 67	341,604 23	299,471 13	161,612 81	231,277 57
North American Accident.	Chicago.	---	298,269 74	96,023 70	1,658,185 37	1,467,528 35	126,478 95	102,246 04
Ocean Accident and Guarantee*.	London.	---	2,298,507 26	1,061,252 12	1,658,185 37	1,467,528 35	761,172 61	1,237,255 16
Pacific Coast Casualty.	San Francisco.	200,000 00	315,042 01	56,383 47	151,618 62	64,972 93	22,156 77	58,658 54
Pacific Surety.	San Francisco.	250,000 00	412,287 50	74,848 03	138,132 48	102,128 36	25,667 57	87,439 47
Preferred Accident.	New York.	200,000 00	1,120,814 54	681,202 46	1,177,712 46	1,191,698 15	512,715 81	239,609 18
Standard Life and Accident.	Detroit.	250,000 00	1,817,715 25	1,183,531 83	1,575,980 47	1,337,543 17	774,558 16	384,183 42
Title Guarantee and Accident.	Los Angeles.	200,000 00	256,816 00	---	86,246 10	61,807 99	---	86,816 00
Title Guarantee and Trust.	San Antonio, Pa.	761,900 00	2,179,791 69	1,116,869 39	218,480 59	200,795 72	4,043 30	301,022 30
Title Insurance and Trust.	San Francisco.	358,600 00	419,581 10	57,626 41	63,180 87	50,596 73	219 40	3,354 69
Title Insurance and Trust.	Los Angeles.	500,000 00	470,536 28	---	200,523 13	158,284 29	920 14	70,586 28
U. S. Fidelity and Guarantee.	Baltimore.	1,700,000 00	3,187,671 36	1,191,727 00	2,035,184 79	1,936,184 40	627,748 63	295,944 36
U. S. Health and Accident.	Saginaw, Mich.	200,000 00	373,111 14	64,789 04	655,334 39	598,004 42	334,842 28	108,322 10
Totals.		\$16,548,000 00	\$56,202,677 60	\$26,189,740 59	\$33,129,205 19	\$29,911,399 93	\$13,334,139 06	\$13,461,937 01

* United States branch statement.

TABLE No. 53.

Showing the various items composing the Assets of Miscellaneous Insurance Companies doing business in California on December 31, 1908.

Name.	Location.	Real Estate.	Mortgage Loans.	Stocks and Bonds Owned.	Collateral Loans.	Cash in Office and in Banks.
Ætna Indemnity	Hartford	\$72,602 22	\$52,523 48	\$589,825 66		\$284,895 44
American Bonding	Baltimore			1,326,854 75	\$150,990 00	281,085 55
American Credit Indemnity	New York			1,667,675 63		264,444 36
American Surety	New York	3,000,000 00	2,500 00	1,996,787 08		462,411 15
California Title Insurance and Trust	San Francisco	37,843 71	292,094 48	109,818 03		87,812 72
City Trust Safe Deposit and Surety	Philadelphia	630,100 00	33,000 00	353,170 50	1,361,966 56	297,662 75
Continental Casualty	Hammond, Indiana		268,440 05	191,380 38	175,000 00	197,730 35
Employers Liability*	London			1,909,508 75		2,719 06
Fidelity and Casualty	New York	619,613 01		4,177,610 00	175,000 00	229,698 69
Fidelity and Deposit	Baltimore	670,000 00		4,670,483 00		351,276 86
Frankfort Marine, Accident and Plate Glass*	Frankfort, Germany			1,005,252 50		1,441 05
Hartford Steam Boiler	Hartford	19,090 00	717,520 00	2,017,149 00		133,814 30
Lloyds Plate Glass	New York	265,000 00		400,406 96		32,100 26
London Guarantee and Accident*	London			1,146,542 78		125,430 92
Maryland Casualty	Baltimore	255,500 00		2,246,926 47		50,100 56
Metropolitan Plate Glass	New York			497,855 00		29,606 79
National Surety	New York	136,000 00	4,916 35	1,034,161 17		318,243 03
New Amsterdam Casualty	New York			549,050 00		93,329 30
New York Plate Glass	New York			462,000 00		50,815 29
North American Accident	Chicago			113,198 61	14,500 00	41,138 88
Ocean Accident and Guarantee*	London			1,957,576 50		141,675 51
Pacific Coast Casualty	San Francisco			229,522 50	10,000 00	7,487 03
Pacific Surety Co.	San Francisco	4,000 00	97,912 86	238,014 75		58,282 59
Preferred Accident	New York			879,446 25		144,405 78
Standard Life and Accident	Detroit	44,470 00	529,877 00	905,075 00		107,410 93
Title Guarantee and Trust	Los Angeles		136,285 00		15,000 00	4,479 70
Title Guarantee and Trust	Scranton, Pa.	91,733 03	155,963 85	121,895 00	744,300 45	225,863 93
Title Insurance and Guaranty	San Francisco		800 00	41,795 00		45,174 85
Title Insurance and Trust	Los Angeles	50,000 00	184,475 39			17,319 71
United States Fidelity and Guaranty	Baltimore	445,611 92	22,650 00	1,890,523 80	23,535 00	174,281 17
United States Health and Accident	Saginaw, Mich.		18,163 24	243,100 00		93,193 00
Totals		\$6,341,563 89	\$2,636,171 70	\$33,898,585 07	\$2,670,292 01	\$4,355,731 51

* United States branch statement.

The Union Casualty and Surety Company of St. Louis, having reinsured with the Maryland Casualty Co., did not file statement.

TABLE No. 58—CONTINUED.

Name.	Location.	Interest Due and Accrued.	Premiums in Course of Collection.	All Other Assets.	Total Assets.
Ætna Indemnity	Hartford	\$4,765 41	\$47,142 57	\$478 69	\$926,907 77
American Bonding	Baltimore	20,321 13	106,138 36	131,715 63	2,142,851 12
American Credit Indemnity	New York	11,822 90	40,395 00	145,230 04	2,129,567 93
American Surety	New York	7,657 37	139,845 51	18,773 50	5,627,954 61
California Title Insurance and Trust	San Francisco	10,317 72	7,862 50	244,592 60	790,351 76
City Trust Safe Deposit and Surety	Philadelphia	11,797 00	16,667 54	3,156,425 81	3,156,425 81
Continental Casualty	Hammond, Ind.	11,450 08	500,207 93	1,344,208 79	1,344,208 79
Employers' Liability*	London	15,561 66	296,179 18	2,270,655 22	2,270,655 22
Fidelity and Casualty	New York	8,417 73	95,507 36	23,364 31	5,792,353 75
Fidelity and Deposit	Baltimore	1,050 00	232,466 83	46,686 57	2,270,655 22
Frankfort Marine, Accident and Plate Glass*	Frankfort, Germany	17,814 14	216,777 66	23,364 31	5,792,353 75
Hartford Steam Boiler	Hartford		53,693 96		1,226,757 03
Lloyds Plate Glass	New York		193,743 84		3,122,165 10
London Guarantee and Accident*	London	13,134 81			751,201 18
Maryland Casualty	Baltimore	11,436 25	235,001 80	99,796 69	1,478,902 35
Metropolitan Plate Glass	New York	3,416 65	33,454 11	2,570 69	2,958,921 77
National Surety	New York	6,701 39	90,434 01	21,099 76	566,903 24
New Amsterdam Casualty	New York	5,396 59	45,157 32	2,545 92	1,611,555 71
New York Plate Glass	New York		59,368 95		695,479 13
North American Accident	Chicago	393 04	56,297 23	3,691 98	572,184 24
Ocean Accident and Guarantee*	London	19,010 40	161,543 21	18,701 64	298,269 74
Pacific Coast Casualty	San Francisco	2,921 65	15,110 83		2,298,507 26
Pacific Surety Co.	San Francisco	915 82	9,608 11	3,553 37	315,042 01
Preferred Accident	New York	7,138 71	89,823 80		412,257 50
Standard Life and Accident	Detroit	18,836 13	212,046 19		1,120,814 54
Title Guarantee and Trust	Los Angeles	1,051 30			1,817,715 25
Title Guarantee and Trust	Scranton, Pa.	1,091 07	22,000 26	100,000 00	256,816 00
Title Insurance and Guarantee	San Francisco			1,789 10	2,179,791 69
Title Insurance and Trust	Los Angeles	6,366 18		251,711 25	419,581 10
United States Fidelity and Guaranty	Baltimore	24,719 08		270,700 00	570,586 28
United States Health and Accident	Saginaw, Mich.	2,443 38	408,357 44	197,992 95	3,187,671 36
Totals		\$257,027 59	\$4,017,772 99	\$2,038,986 19	\$56,202,677 60

* United States branch statement.

TABLE No. 59.

Showing the various items composing the Liabilities, except Capital Stock, of Miscellaneous Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Losses Unadjusted.	Losses Resisted.	Unearned Premiums.	All Other Claims.	Total Liabilities.	Net Surplus.
Etna Indemnity	Hartford	\$20,547 02	---	\$166,350 52	\$4,118 16	\$191,015 70	\$22,792 07
American Bonding	Baltimore	72,395 44	---	332,548 95	604,639 52	1,009,583 91	133,247 21
American Credit Indemnity	New York	256,780 80	\$7,843 00	760,783 28	---	1,015,407 08	114,160 85
American Surety	New York	217,567 20	131,517 81	750,031 04	29,539 04	1,128,655 09	1,999,299 52
California Title Insurance and Trust.	San Francisco	---	---	---	148,474 10	148,474 10	141,867 66
City Trust Safe Deposit and Surety	Philadelphia	13,377 41	94,148 72	113,309 07	2,236,346 75	2,457,181 95	199,243 86
Continental Casualty	Hammond, Ind.	94,426 00	16,633 00	810,733 23	3,521 15	925,313 38	118,895 41
Employers' Liability *	London	126,843 00	397,550 00	932,531 94	100,000 00	1,556,926 94	713,728 28
Fidelity Casualty	New York	377,026 41	651,541 20	2,562,567 06	537,425 77	4,128,560 44	1,163,793 31
Fidelity and Deposit	Baltimore	106,155 71	182,606 20	701,278 18	---	990,040 09	2,797,227 13
Frankfort Marine, Accident and Plate Glass *	Frankfort, Ger.	6,691 48	300 00	422,601 60	434,895 53	864,488 61	162,298 42
Hartford Steam Boiler	Hartford	20,415 03	---	1,851,355 78	32,516 64	1,904,287 45	717,877 65
Lloyds Plate Glass	New York	3,155 21	---	239,466 41	10,813 93	253,435 55	247,765 63
London Guarantee and Accident *	London	16,963 36	12,875 00	461,531 49	536,626 25	1,028,006 10	450,896 25
Maryland Casualty	Baltimore	130,125 14	372,473 31	782,830 24	100,000 00	1,385,428 69	823,393 08
Metropolitan Plate Glass	New York	4,472 97	---	177,990 17	---	182,463 14	184,440 10
National Surety	New York	42,320 78	60,460 71	66,869 40	342,829 49	889,588 88	221,966 83
New Amsterdam Casualty	New York	27,306 00	45,222 00	231,908 98	1,283 51	305,720 49	75,358 64
New York Plate Glass	New York	4,372 33	---	226,482 00	10,052 34	240,906 67	231,277 57
North American Accident	Chicago	12,950 00	---	600,050 81	16,174 30	96,023 70	102,246 04
Ocean Accident and Guarantee *	London	35,190 00	253,147 00	600,050 81	172,884 29	1,061,252 10	1,237,255 16
Pacific Coast Casualty	San Francisco	---	7,500 00	48,883 47	---	50,383 47	58,658 54
Pacific Surety	San Francisco	12,500 00	7,500 00	54,848 03	---	74,848 03	87,439 47
Preferred Accident	New York	63,600 00	55,404 88	562,200 48	---	681,205 36	239,609 18
Standard Life and Accident	Detroit	287,265 51	157,780 00	665,776 18	72,710 14	1,183,531 83	384,183 42
Title Guarantee and Accident	Los Angeles	---	---	---	---	---	56,816 00
Title Guarantee and Trust	Scranton, Pa.	3,686 28	---	50,013 46	1,063,169 65	1,116,869 39	301,022 30
Title Insurance and Guarantee	San Francisco	---	---	---	57,626 41	57,626 41	3,354 69
Title Insurance and Trust	Los Angeles	---	---	---	---	---	70,586 28
United States Fidelity and Guaranty	Baltimore	16,328 91	100,484 55	984,158 48	90,755 06	1,191,727 00	295,944 36
United States Health and Accident	Saginaw, Mich.	24,085 94	2,723 00	26,128 63	11,851 47	64,789 04	108,322 10
Totals	---	\$1,996,579 93	\$2,557,710 38	\$15,017,206 78	\$6,618,243 50	\$26,189,740 59	\$13,464,357 01

* United States branch statement.

TABLE No. 60.
Showing the various items composing the Incomes of Miscellaneous Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Premiums.	Interest.	Rents.	All Other Sources.	Total Income.
Alma Indemnity	Hartford	\$294,428 88	\$25,222 08		\$25,067 75	\$344,719 31
American Bonding	Baltimore	652,120 63	62,682 67	\$973 62	129,380 26	845,157 18
American Credit Indemnity	New York	1,474,257 54	43,653 85		332,450 00	1,850,361 39
American Surety	New York	1,206,808 01	86,522 16		58 20	1,627,977 91
California Title Insurance and Trust	San Francisco	84,338 45	11,768 29	244,589 54	13,444 80	169,791 64
City Trust Safe Deposit and Surety	Philadelphia	192,656 27	110,482 24	17,613 47	11,486 71	332,138 69
Continental Casualty	Hammond, Ind.	1,830,634 27	26,527 98			1,857,162 25
Employers Liability*	London	2,237,826 62	55,353 08		207 50	2,293,387 10
Fidelity and Casualty	New York	4,949,041 18	165,977 90	68,175 96		5,284,346 38
Fidelity and Deposit	Baltimore	1,308,024 37	194,980 01	46,728 19	101,131 25	1,566,616 62
Frankfort Marine, Accident and Plate Glass*	Frankfort, Ger.	1,064,196 93	29,124 55		7,883 65	1,249,508 32
Hartford Steam Boiler	Hartford	1,304,254 36	131,027 97	783 47	126,186 84	1,464,313 63
Lloyds Plate Glass	New York	433,625 09	14,961 43	14,202 65	28,247 83	462,680 17
London Guarantee and Accident*	London	1,194,391 94	38,870 25			1,233,862 19
Maryland Casualty	Baltimore	1,895,612 49	92,510 33	5,487 87	60,746 69	2,054,357 38
Metropolitan Plate Glass	New York	343,156 30	18,291 71		361,448 01	704,896 02
National Surety	New York	848,508 84	37,499 30	6,328 80		912,886 70
New Amsterdam Casualty	New York	523,088 29	20,066 90		543,155 19	1,086,312 38
New York Plate Glass	New York	447,432 99	18,360 13		473,174 63	920,607 62
North American Accident	Chicago	332,075 78	8,989 20		6,861 51	344,604 23
Ocean Accident and Guarantee*	London	1,574,271 00	65,682 60		559 25	1,658,185 37
Pacific Coast Casualty	San Francisco	105,880 75	6,013 60		18,231 57	151,618 62
Pacific Surety	San Francisco	116,854 22	19,479 01		39,724 37	138,132 48
Preferred Accident	New York	1,151,645 86	26,116 60		1,789 25	1,177,712 46
Standard Life and Accident	Detroit	1,512,392 21	60,622 27	28 65		1,575,980 47
Title Guarantee and Trust	Los Angeles	125 00	5,490 00		2,337 34	5,642 34
Title Guarantee and Trust	Scranton, Pa.	71,297 42	108,356 12		80,631 10	260,284 64
Title Insurance and Guaranty	San Francisco	38,690 50	2,519 73		38,827 05	80,037 28
Title Insurance and Trust	Los Angeles	5,219 25	16,383 85		12,070 64	33,673 74
United States Fidelity and Guaranty	Baltimore	1,836,823 69	65,452 62	12,788 76	178,920 03	2,093,985 10
United States Health and Accident	Saginaw, Mich.	644,564 31	9,748 72		120,120 32	874,433 35
Totals		\$29,765,602 74	\$1,578,737 74	\$416,940 98	\$1,367,923 73	\$33,129,205 19

* United States branch statement.

TABLE NO. 61.

Showing the various items composing the Expenditures of Miscellaneous Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Losses.	Dividends.	Brokerage and Commissions.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures.
Etna Indemnity	Hartford	\$59,878 48		\$67,783 39	\$58,385 26	\$12,191 59	\$139,527 27	\$337,765 99
American Bonding	Baltimore	271,728 24	\$80,000 00	144,402 85	65,511 70	30,565 95	274,089 81	866,298 55
American Credit Indemnity	New York	778,405 70	130,000 00	462,971 41	90,431 71	30,817 56	233,135 94	1,725,752 31
American Surety	New York	353,229 65	200,000 00	76,744 94	210,081 96	82,412 49	528,737 41	1,451,206 45
California Title Ins. and Trust.	San Francisco	762 15	141,250 00	2,480 50	25,563 05	474 37	21,150 66	191,680 73
City Trust Safe Deposit and Surety	Philadelphia	85,295 07	30,087 00	14,221 07	67,544 12	14,611 73	175,143 01	386,902 80
Continental Casualty	Hammond, Ind.	883,238 83	30,000 00	304,178 73	133,174 98	25,376 72	374,344 28	1,750,312 74
Employers Liability*	London	888,567 29		581,615 39	41,710 24	40,288 77	440,075 67	1,972,252 36
Fidelity and Casualty	New York	1,813,758 72	77,500 00	1,313,480 20	330,546 99	84,340 39	853,572 05	4,473,198 35
Fidelity and Deposit	Baltimore	466,352 87	279,988 25	356,613 64	107,750 24	66,618 25	238,825 39	1,516,158 64
Frankfort Marine, Accident and Plate Glass*	Frankfort, Ger.	639,608 40	6,000 00	282,121 87	1,500 00	18,667 20	175,603 23	1,103,500 70
Hartford Steam Boiler	Hartford	157,154 67	60,000 00	336,503 68	57,900 00	39,898 87	661,685 65	1,313,142 87
Lloyds Plate Glass	New York	138,613 41	40,000 00	142,705 83	50,764 80	17,438 60	23,698 70	413,221 34
London Guarantee & Accident*	London	473,421 44	46,507 18	322,406 55	55,939 12	17,348 75	201,144 07	1,116,767 11
Maryland Casualty	Baltimore	895,351 34	98,750 00	512,252 67	79,010 91	43,819 41	193,978 34	1,818,162 67
Metropolitan Plate Glass	New York	116,041 48	20,000 00	120,669 91	42,500 40	10,097 75	29,407 56	338,717 10
National Surety	New York	256,488 27	50,000 00	138,367 18	128,627 55	19,200 81	206,606 46	799,290 27
New Amsterdam Casualty	New York	195,378 92		141,924 45	43,451 84	8,636 87	82,337 92	471,730 00
New York Plate Glass	New York	164,187 30	10,000 00	151,360 33	36,161 51	10,788 76	23,825 13	396,323 03
North American Accident	Chicago	119,117 13		84,029 73	45,522 11	6,009 59	44,792 57	299,471 13
Ocean Accident and Guarantee*	London	591,918 72		385,541 39	131,108 15	34,924 73	324,035 36	1,467,528 35
Pacific Coast Casualty	San Francisco	22,156 77		29,898 45	7,120 00	331 38	5,466 33	64,872 93
Pacific Surety	San Francisco	24,073 60	15,000 00	28,255 78	16,200 00	3,379 49	15,219 77	102,128 64
Preferred Accident	New York	469,023 43	12,000 00	403,970 07	85,236 05	22,642 11	198,826 49	1,191,698 15
Standard Life and Accident	Detroit	614,553 76	25,000 00	408,002 04	64,557 31	42,051 51	183,378 55	1,337,543 17
Title Guarantee and Trust	Los Angeles		12,000 00		39,434 00		10,373 99	61,807 99
Title Guarantee and Trust	Scranton, Pa.	357 02	15,214 00	15,866 68	15,190 47	6,025 49	148,142 06	200,795 72
Title Insurance and Guaranty	San Francisco	219 40		14,857 20	19,343 45	130 00	16,046 68	50,596 73
Title Insurance and Trust	Los Angeles	920 14	27,500 00		100,323 74	739 61	28,800 80	158,284 29
U. S. Fidelity and Guaranty	Baltimore	688,259 22	118,832 00	506,820 95	143,243 66	59,120 61	419,908 16	1,936,184 40
U. S. Health and Accident	Saginaw, Mich.	327,617 76	32,000 00	130,398 46	33,313 69	10,483 48	64,191 03	598,004 42
Totals		\$11,475,679 18	\$1,552,638 43	\$7,460,445 34	\$2,327,138 80	\$759,427 84	\$6,336,070 34	\$29,911,389 93

* United States branch statement.

TABLE No. 62.
Showing the various items composing the Assets of Assessment Life and Accident Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Mortgage Loans.	Stocks and Bonds.	Cash in Office and in Banks.	Deposited for Protection of Policy Holders.	(Guarantee Notes.	Interest Due and Accrued.	All Other Assets.	Total Assets.
Bankers Life Association	Des Moines, Ia.	\$4,957,907 88	\$314,694 90	\$225,807 43	\$1,000 00	\$829,571 04	\$134,518 21	\$81,476 49	\$6,544,975 95
Deical Mutual Life	San Francisco	-----	-----	207 00	10,000 00	-----	-----	-----	10,207 00
Fidelity Mutual Aid Ass'n.	San Francisco	283 70	1,122 50	16,961 68	6,000 00	-----	-----	1,089 56	25,457 44
Totals	-----	\$4,958,191 58	\$315,817 40	\$242,976 11	\$17,000 00	\$829,571 04	\$134,518 21	\$82,566 05	\$6,580,640 39

TABLE No. 63.

Showing the various items composing the Liabilities of Assessment Life and Accident Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Losses Unpaid.	All Other Liabilities.	Total Liabilities.
Bankers Life Association	Des Moines, Ia.	\$9,800 00	\$3,356 00	\$94,156 00
Deical Mutual Life	San Francisco	-----	12,439 35	12,439 35
Fidelity Mutual Aid Association	San Francisco	703 55	215 77	919 32
Totals	-----	\$91,503 55	\$16,071 12	\$107,574 67

TABLE No. 64.

Showing the various items composing the Incomes of Assessment Life and Accident Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Membership Fees.	Annual Dues.	Assessments.	Interest and Rent.	All Other Sources.	Total Income.
Bankers Life Association	Des Moines, Ia.	\$264,624 00	-----	\$1,647,980 86	\$261,376 91	\$451,937 97	\$2,625,919 74
Deical Mutual Life	San Francisco	-----	\$341 50	-----	-----	253 00	594 50
Fidelity Mutual Aid Association	San Francisco	88,149 15	-----	-----	567 11	-----	88,716 26
Totals	-----	\$352,773 15	\$341 50	\$1,647,980 86	\$261,944 02	\$452,190 97	\$2,715,230 50

TABLE No. 65.

Showing the various items composing the Expenditures of Assessment Life and Accident Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	Losses and Claims.	Commissions.	Commission for Collecting Assessments.	Salaries of Managers and Agents.	Office Salaries.
Bankers Life Association	Des Moines, Ia.	\$1,231,455 93	\$259,755 73	\$42,466 96	\$14,074 17	\$55,997 09
Decimal Mutual Life	San Francisco	32,033 89	4,642 15	1,279 35	16,457 38	200 00
Fidelity Mutual Aid Association	San Francisco					16,619 56
Totals		\$1,263,489 82	\$264,397 88	\$43,746 31	\$30,531 55	\$72,816 65
Name.	Location.	Medical Examin- ers' Fees.	Rents, Taxes, etc.	All Other Expenditures.	Total Expenditures.	
Bankers Life Association	Des Moines, Ia.	\$40,715 35	\$21,739 77	\$45,307 85	\$1,711,512 85	
Decimal Mutual Life	San Francisco			187 50	387 50	
Fidelity Mutual Aid Association	San Francisco	1,556 15	6,561 83	8,134 31	87,284 62	
Totals		\$42,271 50	\$28,301 60	\$53,629 66	\$1,799,184 97	

TABLE No. 66.

Showing amount of Risks Written, Risks Terminated, and Risks in Force at the end of the year, of Assessment Life and Accident Insurance Companies doing business in California on December 31, 1903.

Name.	Location.	IN FORCE DECEMBER 31, 1902.		RISKS WRITTEN DURING THE YEAR.		RISKS TERMINATED.		IN FORCE DECEMBER 31, 1903.	
		No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
Bankers Life Association	Des Moines, Ia.	89,267	\$178,534,000 00	14,825	\$29,650,000 00	4,203	\$8,526,000 00	99,829	\$199,658,000 00
Decimal Mutual Life	San Francisco	22	22,000 00			1	1,000 00	21	21,000 00
Fidelity Mutual Aid Association	San Francisco	4,437	4,574,500 00	9,711	9,775,000 00	9,143	9,226,000 00	5,005	5,123,500 00
Totals		93,726	\$183,130,500 00	24,536	\$39,425,000 00	13,407	\$17,753,000 00	104,855	\$204,802,500 00

TABLE No. 67.

Statement of Office Collections, showing amounts collected from the different Companies, for the year ending December 31, 1903, for filing and certifying copies of papers, taxes, and substitution of securities.

Name.	Amount.	Name.	Amount.
Fireman's Fund	\$20 00	Amount brought forward	\$30,820 78
Home Fire and Marine	20 00	Orient	20 00
Humboldt County Fire	1 00	Pelican	126 23
Los Angeles County Mutual Fire	1 00	Pennsylvania Fire	2,808 11
Orange County Farmers Mutual Fire	1 00	Phoenix	735 78
San Bernardino County Mutual Fire	1 00	Phoenix	20 00
Sacramento County Patrons and Farmers Mutual Fire	1 00	Providence-Washington	31 50
Santa Barbara County Farmers Mutual Fire	1 00	Queen	1,014 62
Santa Clara County Fire	1 00	Rochester German	262 88
Scandinavian Mutual Protective Fire	1 00	Springfield Fire and Marine	1,765 39
Sonoma County Farmers Mutual Fire	1 00	Spring Garden	65 00
Ventura County Mutual Fire	1 00	St. Paul Fire and Marine	1,117 56
Ætna	20 00	Teutonia	170 00
Agricultural	461 90	Traders	20 00
American	1,465 79	Union	467 78
American	684 10	United Firemen's	302 49
American Central	1,247 76	Victoria Fire	55 46
American Fire	1,423 92	Westchester Fire	877 31
Assurance Company of America	97 03	Western Underwriters	65 00
Caledonian American	149 12	Williamsburg City Fire	614 58
Citizens	724 07	Aachen and Munich Fire	20 00
Commercial Union Fire	85 16	Alliance	20 00
Concordia Fire	65 00	Atlas	33 50
Connecticut Fire	20 00	Austrian Phoenix	65 00
Continental	1,799 94	British America	20 00
Delaware	635 45	Caledonian	27 50
Dutchess	477 59	Commercial Union	20 00
Equitable Fire and Marine	20 00	Hamburg-Bremen Fire	20 00
Fire Association	1,270 96	Helvetia Swiss Fire	30 00
Firemen's	434 21	Law, Union and Crown	20 00
Franklin Fire	1,273 40	Liverpool & London & Globe	20 00
German	20 00	London	20 00
German Alliance	287 04	London and Lancashire Fire	20 00
German American	1,352 14	Manchester	30 50
German Fire	20 00	Netherlands Fire and Life	20 00
Germania Fire	1,298 28	New Zealand	30 00
Glens Falls	591 67	North British and Mercantile	20 00
Globe and Rutgers	26 06	Northern	20 00
Greenwich	166 02	North German Fire	120 00
Hanover Fire	760 68	Norwich Union Fire	20 00
Hartford Fire	30 00	Palatine	20 00
Home	3,048 59	Phoenix	31 50
Indemnity Fire	183 43	Prussian National	20 00
Insurance Company of North America	3,348 39	Rhine and Moselle Fire	30 00
Kings County Fire	94 80	Royal	20 00
Mercantile Fire and Marine	276 97	Royal Exchange	20 00
Michigan Fire and Marine	701 19	Scottish Union and National	20 00
Milwaukee Mechanics	2,106 22	State Fire	20 00
National Fire	20 00	Sun Fire	20 00
National Standard	103 22	Svea Fire and Life	20 00
National Union Fire	97 29	Thuringia	20 00
New Hampshire Fire	976 22	Transatlantic Fire	20 00
New York Fire	163 16	Union	20 00
Niagara Fire	718 84	Western	20 00
North German Fire	260 80	Alliance	21 50
Northwestern National	1,764 37	Alliance-Marine	20 00
		American and Foreign Marine	20 00
		Australian Alliance	20 00
		Baloise	31 50
		Boston	20 00
		British and Foreign Marine	20 00
		Canton	20 00
		China Traders	20 00
Amount carried forward	\$30,820 78	Amount carried forward	\$42,391 47

TABLE No. 67—CONTINUED.

Name.	Amount.	Name.	Amount.
Amount brought forward.....	\$42,391 47	Amount brought forward	\$55,553 34
Federal	81 85	Prudential	20 00
Fonciere	20 00	Security Mutual Life	65 00
Helvetia General	31 50	Security Trust and Life	112 14
Imperial Marine	20 00	State Life	1,221 06
Indemnity Mutual Marine	20 00	Travelers	30 00
London and Provincial Marine	20 00	Union Central Life	2,303 66
Mannheim	20 00	Union Mutual Life	2,244 23
Man On	20 00	Washington Life	20 00
Marine	20 00	Life Association of America	65 00
Maritime	20 00	Continental Casualty	30 00
Nord Deutsche	65 00	Employers Liability	20 00
North China	20 00	Fidelity and Casualty	20 00
Ocean Marine	20 00	Frankfort Marine, Accident	
Po On	30 00	and Plate Glass	20 00
Reliance Marine	20 00	London Guarantee and Acc'dt. ..	20 00
Sea	20 00	Maryland Casualty Co.	839 92
Standard Marine	20 00	New Amsterdam Casualty	20 00
Switzerland General	331 50	North American Accident	40 00
Thames and Mersey	20 00	Preferred Accident	20 00
Union Marine	20 00	Standard Life and Accident	611 07
Universo Marine	20 00	Union Casualty and Surety	400 29
Upper Rhine	65 00	U. S. Health and Accident	65 00
Wilhelma	321 50	Pacific Coast Casualty	20 00
World Marine	65 00	Etna Indemnity	20 00
Yangtse	20 00	American Bonding	242 85
Ætna Life	20 00	American Surety	20 00
Columbian National Life	65 00	City Trust Safe Deposit and	
Connecticut Mutual	20 00	Surety	20 00
Conservative Life	50 00	Fidelity and Deposit	898 84
Equitable Life	20 00	National Surety	20 00
Fidelity Mutual Life	2,154 99	Pacific Surety	60 00
Germania Life	20 00	Title Guaranty and Trust	65 00
Hartford Life	75 00	Union Surety and Guaranty	2,251 91
Home Life	20 00	U. S. Fidelity and Guaranty	972 07
Manhattan Life	20 00	Lloyds Plate Glass	20 00
Massachusetts Mutual Life	20 00	Metropolitan Plate Glass	20 00
Metropolitan Life	20 00	New York Plate Glass	30 00
Minnesota Mutual Life	20 00	Hartford Steam Boiler	20 00
Mutual Life	30 00	California Title Insurance and	
Mutual Benefit Life	20 00	Trust	20 00
National Life	20 00	Title Insurance and Guaranty	20 00
New England Mutual Life	20 00	Title Insurance and Trust	20 00
New York Life	30 00	American Credit Indemnity	30 00
Northwestern Mutual Life	20 00	Ocean Accident and Guarantee ..	20 00
Northwestern National Life	370 00	Bankers Life Association	20 00
Pacific Mutual Life	65 00	Decimal Mutual Life	20 00
Penn Mutual Life	8,285 26	Fidelity Mutual Aid Ass'n	20 00
Phoenix Mutual Life	20 00	Safe	135 00
Provident Life and Trust	405 27	Title Guarantee and Trust	35 00
Provident Savings Life	20 00		
Amount carried forward.....	\$55,553 34	Total	\$68,761 38

I certify the foregoing to be a full, true, and correct statement of the receipts of the Insurance Department of the State of California for the year nineteen hundred and three.

E. MYRON WOLF,
Insurance Commissioner.

Subscribed and sworn to before me, this 1st day of August, A. D. 1904.

W. H. TAYLOR,
Deputy Insurance Commissioner.

FIFTH REPORT

OF THE

STATE DAIRY BUREAU

TO THE

GOVERNOR OF THE STATE OF CALIFORNIA.

1902-1904.



SACRAMENTO :

W. W. SHANNON, : : : : : SUPERINTENDENT STATE PRINTING.
1905.

THE STATE DAIRY BUREAU.

JOHN A. BLISS, <i>Chairman</i> ,	-	-	-	-	-	-	-	OAKLAND.
DR. THOMAS FLINT,*	-	-	-	-	-	-	-	SAN JUAN.
JOHN FLANNERY,*	-	-	-	-	-	-	-	SAN JOSÉ.

J. M. THOMAS, <i>Agent and Secretary</i> ,	-	-	-	-	-	-	SAN FRANCISCO.
WM. H. SAYLOR, <i>Chemist and Assistant Secretary</i> ,	-	-	-	-	-	-	SAN FRANCISCO.

Office: 95 Market Street, San Francisco.

*Deceased.

SAN FRANCISCO, October 1, 1904.

To His Excellency, GEORGE C. PARDEE, Governor of the State of California:

SIR: In compliance with the requirements of an Act of the Legislature, approved March 4, 1897, we have the honor to submit herewith the fifth report of the State Dairy Bureau for the two years ending October 1, 1904.

Respectfully,

JOHN A. BLISS,

Chairman.

J. M. THOMAS, Agent and Secretary.

FIFTH REPORT OF STATE DAIRY BUREAU.

The two years covered by this report have been notable in the history of the dairy industry of California: First, in the remarkable prosperity that has been experienced by those engaged in its various branches, as a result of extremely good prices that have come to them for the products of their cows; and, secondly, for the impetus this prosperity has given to the expansion of this industry, which is bringing dairying to the front as one of the leading industries of the State and giving California rank as one of the important dairy States of the Union.

With this activity in the dairy interests of the State, the State Dairy Bureau has been somewhat intimately related, although the authority and usefulness conferred upon it by the laws have been limited as compared with the efforts other States are making, whereby a wise conservative supervision of the dairy interests is maintained on the part of the State. By their nature, and their high food value and the important part they play in the commercial affairs of the country, dairy products, more than any other article of food, have been a source of temptation for adulteration and sophistication, detrimental to both the producer and the consumer. In a number of States well adapted to dairying the absence of any regulation in this respect has prevented a healthful development of the dairy industry, with the result that the natural fertility of the soil has been greatly impaired through the farming of crops that remove fertility from the land, which instead of being lost would have been enriched by dairying. It is a generally recognized fact that at the rate at which adulteration and substitution of dairy products have been going on for the last two decades legitimate dairying would have been next to impossible had not legislative prohibition intervened in all the States where the dairy business has assumed prominence.

For ten years preceding 1895 California furnished a field for the sale of a large amount of oleomargarine brought from the East. This not only displaced the consumption of a large amount of butter, but its indiscriminate use had such a demoralizing effect that butter consumption was seriously affected, and the period when the oleomargarine business was unrestricted in the State was characterized by ruinously low prices for dairy products. Since effective legislation has restricted

the oleomargarine business by preventing the article being sold as butter, the butter production of California has almost doubled in quantity in a period of ten years as a result of profitable prices that have ruled in the markets.

This restriction of the use of oleomargarine as a substitute for butter has been brought about through an Act of the Legislature approved March 9, 1895, and amended at the session of 1897, as published in the Appendix of this report. It provides that oleomargarine can not be sold when colored to resemble butter unless each and every package shall be labeled to show that it is a substitute for butter and not butter. To enforce the provisions of this Act it provides for an executive commission to be known as the State Dairy Bureau of California, which consists of three members, appointed by the Governor of the State, who are to serve without compensation. These are authorized to employ an agent and secretary, a chemist, and such other assistants as it may deem necessary. The sum of \$5,000 is appropriated for each fiscal year, out of which salaries and expenses are paid.

We regret to report the loss to the Bureau of two of its members by death during the past two years. Mr. John Flannery of Santa Clara County died January 20, 1903, after serving as a member of the Bureau for over two years. Dr. Thomas Flint of San Juan, San Benito County, died June 19, 1904, after serving as a member of the Bureau continuously under reappointment since its establishment in 1895. Both of these gentlemen have been missed from the councils of the Bureau, in the work of which they were deeply interested. They were pioneer dairymen and fully realized the serious menace that fraudulent dairy products were to their interests and those of every dairyman in the State, and were eager to see that nothing be left undone that would relieve the dairy industry of the State of fraud.

The employés of the Bureau remain the same as at the time of submitting our previous report. Owing to the small amount of funds available, which permits of the employment of only a small force, and the desire on the part of the Bureau to maintain a close watch in the leading markets for violations of the oleomargarine and other laws, which it is required to enforce, its agent and secretary has been kept, during a greater part of the time, in the field as an inspector, the office work being left in the hands of the chemist, whose time permitted his handling this line and also acting as inspector for the City of San Francisco.

OLEOMARGARINE.

Since our last report the oleomargarine industry of the United States, which has consisted primarily in the imposition of its product upon the people in the disguise of butter, has been subjected to restrictions, in addition to those imposed by the majority of the States, through the

enactment by Congress of a law imposing an internal revenue tax of ten cents a pound on oleomargarine colored in imitation of butter and only a nominal tax of one-fourth of a cent per pound on the uncolored article. The enforcement of this law has been vigorously protested in the courts by the oleomargarine interests, but it has been sustained in every contested feature, with the result that the artificial coloring of oleomargarine in imitation of butter seems no longer possible, and the production of the article has fallen off enormously, as is shown by the accompanying figures. This restriction has compelled the makers of oleomargarine either to sell uncolored oleomargarine or to find some means of deception other than through the use of strictly coloring material.

The yearly output of oleomargarine and its growth from year to year, until the Federal law checked its sale in unprotected States, or in those in which State laws were only partly successful in preventing the substitution of the article for butter, is shown in the following table furnished by the Commissioner of Internal Revenue of the Treasury Department:

Growth of Oleomargarine Production.

	Total Production—Pounds.
1887 (from November 1, 1886).....	21,513,537
1888.....	34,325,527
1889.....	35,664,026
1890.....	32,324,032
1891.....	44,392,409
1892.....	48,364,155
1893.....	67,224,298
1894.....	69,622,246
1895.....	56,958,105
1896.....	50,853,234
1897.....	45,531,207
1898.....	57,516,136
1899.....	83,130,474
1900.....	107,045,028
1901.....	104,943,856
1902.....	126,316,436
1903.....	71,804,102
1904.....	48,071,480
Total.....	1,105,600,278

The effect of the new Federal law, which became operative two years ago, is plainly apparent from the above figures.

Of the total production for the last two years, as shown above, so far as the Bureau has been able to ascertain, a very small amount found its way into California, and the bulk of this, it believes, was reshipped to adjoining States and Territories or exported or used as ship's stores. The following table shows, for the last two fiscal years, the exports of oleomargarine from San Francisco to foreign countries and to non-contiguous territory of the United States:

Exports of Oleomargarine from San Francisco.

Fiscal Year.	Non-Contiguous Territory.		Foreign Territory.	
	Pounds.	Value.	Pounds.	Value.
1902-03.....	100,900	\$13,385	125,470	\$16,000
1903-04.....	27,880	4,382	30,440	4,736

Of that which has been consumed in the State, dealers have found the best market among persons who employ large numbers of laborers to whom board is supplied as part of their compensation. A number of contractors on railroad and construction work in the southern part of the State have used it freely. The product used in this way, in every case the officers of the Bureau could find, was of a very light shade of color that readily distinguished it from butter of the usual color. On this only a quarter of a cent internal revenue tax was paid, indicating that the Government passed it as uncolored oleomargarine.

When the new Federal law went into effect, dealers in oleomargarine in this State seemed to be under the impression that this uncolored oleomargarine was free from any restrictions by our State law, which induced quite a number of dealers to undertake to handle it, not only disposing of it to those who supply board to many laborers, but also to the retail grocery trade and especially to restaurants and hotels. These efforts were largely confined to Los Angeles and vicinity, where the Agent of the Bureau followed the matter up closely, and by explaining that the State law does not exempt uncolored oleomargarine from being labeled as such when sold, in most cases the dealer ceased handling the article or proceeded by labeling it as required by law. That the consuming public will not use oleomargarine unless disguised as butter was again shown by the Bureau insisting upon the necessity of the labeling of these goods as oleomargarine or substitute for butter. During the fall of 1903 over seventy wholesale and retail internal revenue oleomargarine licenses were in force in Los Angeles and vicinity, while at the present time the number does not exceed five, and these are held by parties who supply persons who feed it to their employés; and after repeatedly inspecting the boarding-houses of these concerns the Bureau can safely state that any consumers of oleomargarine that there might be within the jurisdiction of the State law are thoroughly advised when they eat oleomargarine instead of butter.

During the two years only one prosecution was made for violation of the law. On March 26, 1904, the Agent of the Bureau visited the restaurant of Quong Ling, a Chinaman, in Los Angeles, who, in place of butter, served him with an article that analysis showed to be oleomargarine. The party was immediately arrested and taken into the police court, where he plead guilty and was fined \$100.

This in brief represents the efforts of the Dairy Bureau to prevent the fraudulent sale of oleomargarine as butter. The work of inspection has been diligently pursued without attracting much attention, and the Bureau can offer as the best testimonial in behalf of its efforts the fact that it has not, in the two years covered by this report, heard of a single complaint that the oleomargarine law was being violated that proved to be the case upon investigation.

RENOVATED BUTTER.

A law which the Dairy Bureau is directed to enforce is one relating to the sale of "renovated," or, as sometimes called, "process" butter. This class of butter, as its name indicates, is usually made from butter unfit for consumption on account of its age or from other influences that have destroyed its palatability. By melting this butter, and by various processes of eliminating the products of fermentation, and churning the melted oil in milk, an article is produced that is pure and temporarily free from objectionable rancid flavors, but if exposed to ordinary temperature it almost immediately loses its good quality. This temporary sweetness enabled makers and dealers in the past to conceal the true character of the article, and much of it was sold for the superior grades of butter, to the injury of the producers of fine butter; and at the same time a market was created, through the renovating business, for large amounts of butter that was improperly made, or allowed to become unmerchantable from age. The renovating business therefore became an obstacle to improvement and progress in the butter industry by the utilizing of poor butter and enabling its being passed off for a well-made article of butter. The progressive dairymen and creamerymen in all the leading dairy States of the Union have induced their legislatures to enact laws compelling the conspicuous labeling of all packages of renovated butter as such, in order that the public may know when it purchases the article that it is getting a made-over piece of butter of only temporarily good quality, or while it is in a state of refrigeration. California has such a law which the State Dairy Bureau is directed to enforce.

Through the enforcement of this law the Bureau has found an important defect that it recommends be remedied by an amendment to the law, which now provides that it shall be labeled as either "renovated" or "process" butter. The latter term is entirely indefinite, and instead of conveying the real character of the product, is often construed by the uninformed to indicate an improved article. The term "renovated" more clearly defines the product, and the law should be amended so as to require this term in labeling this class of butter for the guidance of the purchaser and the protection of producers of the higher grades of butter.

The high prices that have prevailed in the butter markets of California and the cheapness with which renovated butter was procurable induced a number of wholesale dealers in San Francisco to import a considerable quantity of it within the past two years. The bulk of it was disposed of, properly labeled, so far as we have ascertained, to restaurants, hotels, boarding-houses, and bakers. Two years ago an effort was made by several firms to introduce it among the retail grocery trade. In most cases the retailer was advised by the wholesale dealers, who are without exception familiar with the law, as to the necessity of labeling all retail packages sold, as required by the law; but in a few instances found by the Bureau it proved to be pure deception on the part of the wholesaler, and in every case retailers thus imposed upon returned the renovated butter to the wholesale dealer.

In order to emphasize among the butter trade the fact that the law must be complied with, one retail dealer who was found selling renovated butter without labeling it as such was prosecuted in San Francisco. Charles F. Suss, in January, 1903, sold to a representative of the Bureau a quantity of renovated butter, inclosing it in a package without any label showing its true character, although analysis showed it to be renovated butter. He was arrested on complaint made by the assistant secretary of the Bureau, and taken before Judge Fritz of the Police Court in San Francisco, before whom he plead guilty and offered ignorance of the law as his excuse. The court remarked that this being the first case brought for violation of the law, he would continue the case and withhold the penalty to see if other cases would be brought. The publicity that followed this case seemed to have had the effect of warning retail dealers from attempting to sell it without complying with the law, and by labeling it only those who are misled by the term "process" butter, which is permitted, will purchase it in the retail trade.

During the season of light production in 1902-03, it was learned by the officers of the Dairy Bureau that a number of dealers in San Francisco had taken contracts to supply certain State institutions with their year's requirement of butter at prices under which it was impossible to supply genuine creamery butter. Feeling that possibly some renovated goods might have been substituted, the butter used by the institutions was closely watched. The management of the State Hospital for the Insane at Napa was requested to send a sample of the butter furnished to it; the sample was received by express, and was analyzed and found to be renovated butter. The assistant secretary was sent to Napa to secure another sample, but by this time a second lot had been shipped to the institution, which analysis proved to be normal butter. It was found that the renovated butter was furnished by Messrs. Martin, Dangers, Camm & Co., of San Francisco. The matter was taken up with the District Attorney of Napa County, Hon. Raymond Benjamin,

who advised the prosecution of the firm for violating the law relating to renovated butter, on the strength of the first sample. A complaint was entered and a warrant issued for the arrest of Samuel Martin by Justice of the Peace Robert McNight of Napa. Martin was released on bail pending trial, and his attorneys immediately appealed to the Superior Court of Napa County for a dismissal of the case for want of evidence, which was opposed by the District Attorney, and the motion to dismiss was lost. Two days later the Bureau was surprised to receive a letter from the District Attorney that he himself had made a motion to have the case dismissed in the justice court, which was granted. The only explanation offered by the District Attorney for this sudden change in his course in the case was the difficulty in proving the identity of the sample which was forwarded by express from the hospital to the Bureau, and the expense that it would involve upon his county.

CHEESE-GRADING LAW.

An Act of the Legislature, approved March 4, 1897, classifies cheese into several grades according to the amount of fat in the milk out of which the cheese is made, and the quality of the cheese upon the fat it contains. Prior to the enactment of this law many cheese-producers practiced a partial skimming of the milk out of which their cheese was made, using the cream for butter-making or some other purpose, and the solids remaining in the skimmed milk entered into the cheese, the result of which was that our markets received a large amount of cheese deficient in fat and the general quality was poor.

Under the law all cheese must be labeled as to its fat content—an innovation that the producers themselves welcomed—and the result has been a most remarkable improvement in the quality of California cheese, although there remains much room for improvement in other respects if California cheese-producers hope to displace with their product the fine grades that come from the East.

The Dairy Bureau is charged with enforcing the cheese law referred to. It has found producers exceedingly willing to comply with the Act and label their product "skim" cheese if it is made from skimmed milk, and "half skim" if made from partly skimmed milk. Fortunately there is no demand for these grades of cheese, and only that made from unskimmed milk finds a market, with the result that out of analyses of nearly five hundred samples made since the law became operative only a few that were from cheese labeled "full cream" fell below the standard fixed by the law. These were generally accompanied by an excess of water due to faulty making, in which case the makers were reminded thereof and asked to correct the fault.

ACCURATE TESTING APPARATUS.

A feature of the dairy line that seems to have necessitated legal regulation, since most of the leading dairy States have adopted some measure, is that of the tendency to use inaccurate apparatus for determining the commercial value of milk and cream of varying qualities. The old method of making butter and cheese on farms is rapidly being superseded by the public creamery and cheese factory; not so much in case of the latter in California as in the other States. These creameries and cheese factories either buy outright the milk or cream of the dairymen, or else by coöperation the dairymen pool their milk in a plant and convert it into butter or cheese and market the product collectively. In either case it is necessary to determine with accuracy the amount of butter-fat in the milk or cream that enters into the transaction, owing to the wide variation that exists in the milk of different animals and herds, or in case of cream by the manner in which it is separated. Prior to the invention of simple tests by means of which the value of milk or cream is accurately determined, and the temptation of the seller to adulterate his product, the existence of the public creamery and cheese factory was next to impossible. The invention of the Babcock test fifteen years ago solved the difficulty by giving the dairy industry an extremely simple means of accurately determining the fat content of milk, upon which its value depends.

Soon after the introduction of this test an abuse crept in, either through intention to defraud or from carelessness in the standardizing of the apparatus used with the test by which wrong results are obtained. Six or eight years ago the chemist of this Bureau on his own account investigated much of this apparatus and found that correct apparatus was the exception rather than the rule. As a result, many creamerymen have asked the chemist to test the accuracy of their apparatus; and through insisting upon it from dealers it now rarely happens that inaccurate pieces are found, and during the past two years very little testing for accuracy has been requested.

In 1901 the Legislature enacted a law to correct this abuse. This law, which is presented in the Appendix, covers the ground very fully, but if it had gone further and authorized the Bureau to officially inspect apparatus and see that the law is enforced it would have become still more effective.

LABORATORY WORK.

In this connection we take occasion to refer to the work of the chemist. The few attempts to violate the different dairy laws which the Bureau is charged with enforcing have resulted in comparatively few samples having been submitted to him for analysis, and of those which have been analyzed invariably they turned out not to show a violation of

the law. At the same time considerable work has been done in the laboratory for the accommodation of dairymen, creamerymen, and dealers. This consisted mostly in making determinations of fat in milk and cream by the Babcock test. It happens almost daily that samples are received from creameries and dairymen over which the buyer and the seller are unable to agree in their determinations of fat. This is becoming more and more the case with the increasing tendency on the part of dairymen to ship cream to creameries located many miles away by rail, especially to city creameries. In most cases the cream is tested at both ends, which gives rise to differences in results that the chemist of the Bureau is asked to settle. Other cases arise from the tendency of making contracts and dealing in milk and cream on a minimum butter-fat basis, especially in the fresh milk trade. This tendency and the regulations of municipalities that have fat standards bring to the Bureau many samples for testing. In all such cases where information is sought or where a dairyman or creameryman can be accommodated the tests are made gratuitously, but the Bureau declines to make regular tests simply to save work for those who are in position to make them for themselves.

Quite a number of samples of butter have been submitted by creameries and dealers with the request that the percentage of water in them be determined. Buttermakers quite frequently aim to incorporate an excessive amount of water in their butter, often at the expense of quality. This and the fact that the Federal law imposes a tax of ten cents a pound on butter containing an excess of water have aroused much interest in this feature of butter-making, with a consequent desire on the part of producers and dealers to know the water-content of their butter, and in all cases they have been accommodated.

DAIRY STATISTICS.

In 1899 the Legislature enacted a law which required that, "for the purpose of obtaining accurate information regarding the dairy industries of the State, the Dairy Bureau shall annually require in writing from each owner or manager of a dairy, owning or controlling any dairy stock exceeding one dozen cows in number, a report showing the location of the dairy, number and breed of all dairy stock in use or appurtenant thereto, together with such other pertinent information as said Bureau may require. Information thus obtained shall be embraced in the annual report of the Dairy Bureau."

In trying to carry out this duty the names of over four thousand dairymen have been secured from the books of the assessors of the different counties, and to each a blank was mailed asking for such information as the Bureau considered would be useful. But regardless of its efforts to simplify a series of inquiries that would be comprehended by those to whom they were sent for the desired information.

the Bureau has found it difficult to secure and report upon the information required by the law.

The most important feature in dairy statistics is that of reporting the output of dairy products. In the table below is shown the production of butter by counties.

PRODUCTION OF BUTTER FOR THE TWO YEARS ENDING OCTOBER 1, 1903 AND 1904.

Counties.	FOR YEAR ENDING OCTOBER 1, 1903.			FOR YEAR ENDING OCTOBER 1, 1904.		
	Creamery Method.	Dairy Method.	Total.	Creamery Method.	Dairy Method.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Alameda	477,621	194,140	671,761	584,943	116,421	701,364
Alpine		21,802	21,802		23,862	23,862
Amador	76,753	151,505	248,258	97,211	162,016	259,227
Butte		151,737	151,737	18,264	165,775	184,039
Calaveras		151,512	151,512		142,182	142,182
Colusa		129,490	129,490	139,752	28,622	168,374
Contra Costa	60,408	355,290	415,698	62,673	337,848	400,521
Del Norte	358,112	193,442	551,554	452,064	169,561	621,622
El Dorado	66,296	134,208	200,504	79,216	113,312	192,528
Fresno	1,391,390	1,768	1,393,158	1,618,506	1,240	1,619,746
Glenn		129,708	129,708	42,321	124,648	166,969
Humboldt	3,913,446	22,340	3,935,786	3,771,135	22,560	3,793,695
Inyo	97,025	64,960	161,985	53,810	65,920	119,730
Kern	175,213	7,856	183,069	192,476	8,460	200,936
Kings	923,682	6,820	930,502	1,093,796	5,684	1,099,480
Lake	34,208	81,480	115,688	38,160	93,120	131,280
Lassen	197,341	154,922	352,263	217,485	132,439	349,924
Los Angeles	1,989,288	7,150	1,996,438	1,617,469	12,600	1,630,069
Madera		72,326	72,326		85,120	85,120
Marin	1,510,544	2,411,744	3,922,288	1,493,733	2,319,504	3,813,237
Mariposa		11,230	11,230		13,264	13,264
Mendocino	417,303	368,725	786,028	429,334	357,694	786,983
Merced	904,311	1,311	905,622	1,562,587	1,184	1,563,771
Modoc		126,440	126,440		133,842	133,842
Mono		19,320	19,320		19,860	19,860
Monterey	520,471	77,257	597,728	528,471	109,511	637,982
Napa	160,452	326,370	486,822	213,338	405,675	619,013
Nevada	37,623	76,660	114,283	32,236	98,562	130,798
Orange	520,173	2,817	522,990	494,120	1,425	495,545
Placer		197,470	197,470		233,046	233,046
Plumas	118,284	284,468	402,752	133,881	240,624	374,505
Riverside	672,824	7,264	680,088	599,062	1,384	600,446
Sacramento	1,243,159	98,708	1,341,867	1,495,439	12,854	1,508,293
San Benito	172,539	7,380	179,919	203,812	1,729	205,541
San Bernardino	109,751	41,110	150,861	41,596	124,511	166,107
San Diego	504,658	390,884	895,542	520,491	260,921	781,412
San Francisco						
San Joaquin	959,629	3,522	963,151	1,012,844	2,724	1,015,568
San Luis Obispo	281,652	1,087,534	1,369,186	249,671	798,185	1,047,856
San Mateo	145,085	259,734	404,819	126,469	184,881	311,350
Santa Barbara	707,409	80,764	788,173	403,696	86,512	490,208
Santa Clara	171,546	18,826	190,372	161,671	19,364	181,035
Santa Cruz	395,727	10,516	406,243	396,982	19,501	416,483
Shasta		21,612	21,612		5,820	5,820
Sierra	174,185	12,628	186,813	59,621	53,441	113,062
Siskiyou	403,566	3,322	406,888	430,896	11,550	442,446
Solano	218,703	447,944	666,647	166,262	366,033	532,295
Sonoma	1,178,607	1,361,882	2,540,489	1,270,526	1,151,154	2,421,680
Stanislaus	1,152,247	7,314	1,159,561	1,558,269	6,480	1,564,749
Sutter	102,475	70,520	172,995	313,481	26,804	340,285
Tehama	59,680	90,314	149,994	62,064	92,201	154,265
Trinity		11,334	11,334		12,684	12,684
Tulare	1,082,588	7,860	1,090,448	1,490,918	6,844	1,497,762
Tuolumne		24,286	24,286		27,686	27,686
Ventura	20,243	159,326	179,569	28,443	158,864	187,307
Yolo	844,648	12,346	856,994	812,582	18,603	831,185
Yuba	74,614	8,640	83,254	61,284	7,643	68,927
Totals	24,591,271	10,195,018	34,786,289	26,433,060	9,203,900	35,636,969

The figures in the above table show that California is by no means in the rear rank of States as a butter-producer. Her growth in this line is well shown in the following table, which gives the butter production in pounds for each of the past eight years, as compiled by this Bureau :

Year.	Creamery Butter.	Dairy Butter.	Total.
1897-----	10,866,646	17,811,733	28,678,439
1898-----	10,410,497	13,280,549	23,691,028
1899-----	12,725,814	12,143,270	24,868,084
1900-----	16,486,695	12,296,164	28,783,859
1901-----	19,017,512	10,683,690	29,701,202
1902-----	21,593,021	9,935,741	31,528,762
1903-----	24,591,271	10,195,018	34,786,289
1904-----	26,433,060	9,203,909	35,636,969

The remarkable but steady growth of the State's butter production, as shown by the figures above, is one of the conspicuous features of California's industrial life. It goes to show that her citizens are awakening to the fact, which they have heretofore been slow to recognize, that almost every county in the State has areas adapted to dairy farming not excelled by any part of the world, while in the counties located in the Sacramento and San Joaquin valleys only the application of irrigation water is required to make almost the entire area one alfalfa meadow for eight or ten months of the year. Not only are Californians learning to appreciate the possibilities of the dairy business, but during the past few years these possibilities have attracted many settlers from other States, and what were formerly large grain-growing areas are now numerous small dairy farms.

It will be noted in the table that the increase in butter production is confined to those counties located in either the San Joaquin or the Sacramento valley. In fact, these counties have had to make up for a heavy decline in butter production in the counties along the coast south of San Francisco Bay, since this part of the State suffered from a severe drought during the winter and opening of the present year. Had it not been for this drought the gain of this last year over the previous year would have been much larger. In Fresno, Kings, Merced, Sacramento; San Joaquin, Stanislaus, Sutter, and Tulare counties, the production exceeded that of last year by from fifteen to thirty per cent, and a similar rate of increase was made last year over the preceding year. This means that these counties, in at least some of which the butter consumed prior to ten years ago was purchased from outside markets, doubles in butter production about every five years.

A feature which is retarding a still more rapid development of dairy-ing is the difficulty of securing competent labor to work on dairies. This drawback, however, has had one desirable effect, in that it checks a tendency on the part of our citizens to conduct dairy enterprises on an extensive scale with large numbers of cows: while on the other hand, by maintaining prices which might not be possible if such extensive

dairy enterprises were readily practicable, there has been much to encourage the dairyman operating on a small scale and doing the work himself assisted by his family. It is this that has brought about a very desirable tendency, in many parts of the State where dairying is becoming conspicuous, of converting large holdings of land into numerous small farms, whose owners are invariably very prosperous.

BUTTER IN SAN FRANCISCO.

The amount of butter received in the San Francisco market has been a feature of interest among both dealers and shippers. The following table, compiled from figures by the Merchants' Exchange of San Francisco, gives these butter receipts for each of the past four years by months:

	1901.	1902.	1903.	1904.
October	918,545	964,895	918,147	784,400
November	892,416	884,665	720,077	792,900
December	947,220	927,770	840,570	843,500
January	936,780	935,615	725,080	745,783
February	1,038,910	952,400	862,500	1,028,086
March	1,400,480	1,177,815	1,143,200	1,499,828
April	2,058,840	1,948,895	2,268,440	1,520,152
May	1,999,510	2,265,560	2,136,400	2,209,518
June	1,684,640	1,908,820	2,043,000	2,630,537
July	1,593,110	1,679,047	1,919,500	1,424,952
August	922,320	931,945	1,010,700	1,213,049
September	840,180	945,621	924,600	1,020,987
Totals	15,222,951	14,823,048	15,511,214	15,713,692

The above figures show only receipts from Coast points and do not include Eastern butter. It may seem surprising that the receipts in San Francisco have not kept pace with the increased production in the State, already noted. The explanation is to be found in the fact that places to which much butter was shipped in former years from the local market are now being supplied direct by the creameries. For instance, a few years ago Los Angeles and the mountain districts (in which the mining interests of the State are located) were supplied with large amounts of butter from San Francisco, but at the present time the bulk of this trade goes direct to the creameries located in the San Joaquin and Sacramento valleys. The more recent practice of shipping cream to be made into butter in the cities, instead of butter, also has its effect in offsetting butter receipts.

EASTERN BUTTER.

In the two years covered by this report a large amount of butter has been shipped into California from the East. Only figures for the year ending June 30, 1904, have been obtainable, and these may possibly not include all that arrived, as they account only for full carload shipments. They show 3,340,000 pounds, or almost ten per cent of what our State

produces. Most of this went into cold storage for use during the season of light production. That this extra amount of butter has not been required here is well shown by the low prices that ruled last winter on cold-storage butter, and which are again predicted for this coming winter. The importation of this butter from the East is brought about through the fact that the demand for butter during the surplus season for the purpose of storing has been so strong that the California markets have been maintained at a much higher figure than was the case in the East during its surplus season. The Eastern surplus season coming later than in California, and the price going much below that in California, induced our dealers to buy this Eastern butter, which was added to local storage stock, with the result that an excess of storage butter has been on hand, causing heavy losses to the holders. It is more than likely that this experience will in the future prevent the local markets from going too far above those in the East during the surplus season and therefore make it impossible to bring butter from the East at a profit.

CHEESE.

The production of cheese in this State for each of the past two years is shown in the following table:

CHEESE PRODUCTION FOR THE YEARS ENDING OCTOBER 1, 1903 AND 1904.

Counties.	1903.	1904.	Counties.	1903.	1904.
	<i>lbs.</i>	<i>lbs.</i>		<i>lbs.</i>	<i>lbs.</i>
Contra Costa.....	4,228	23,258	San Luis Obispo.....	128,952	63,935
Fresno.....	116,180	150,156	San Mateo.....	736,501	748,231
Inyo.....	1,200	14,000	Santa Barbara.....	8,640	
Kern.....		15,846	Santa Clara.....	842,928	810,264
Lake.....	86,340	93,120	Santa Cruz.....	470,337	375,773
Lassen.....	32,229	28,866	Sierra.....	1,720	
Los Angeles.....	880,640	800,945	Siskiyou.....	12,250	11,550
Marin.....	533,167	507,788	Sonoma.....	158,064	178,183
Mendocino.....	33,758	35,685	Stanislaus.....	242,460	152,400
Modoc.....	5,800	6,000	Sutter.....	291,205	233,114
Monterey.....	856,647	694,017	Tehama.....	57,531	67,012
Napa.....	271,147	37,054	Tulare.....		5,625
Plumas.....	9,000	10,950	Yuba.....		42,443
Sacramento.....	894,971	537,625			
San Benito.....	432,156	454,432	Total.....	7,218,639	6,133,898
San Joaquin.....	110,588	35,626			

Compared with other years the figures show as follows:

Year.	Pounds.
1897.....	6,309,625
1898.....	5,148,372
1899.....	5,294,938
1900.....	4,989,960
1901.....	5,681,366
1902.....	6,503,441
1903.....	7,218,639
1904.....	6,133,898

It is seen from the above figures that there has not been that increase in the production of cheese in the State which is so noticeable in the case of butter. The decline of the last year from that of the preceding one was largely attributable to the long period of drought in some parts of the State in which large amounts of cheese are made. Another factor that is responsible for the lack of progress in the cheese business has been the prices that ruled in the markets. California cheese-producers make a class of cheese acceptable only to consumers within the State. After this demand is once satisfied there is no other market that will take any large amount, and in consequence a surplus of local production is very likely to happen. If our cheese industry is ever to assume any proportions, it is apparent that our producers must make a quality of cheese that will meet the demands of the markets beyond the State line. There is an excellent field for the exportation of cheese, that could be developed through shipping a superior article.

BUTTER AND CHEESE PRICES.

The table below shows the average monthly price of the highest grade of cheese, and of extra fancy creamery butter, in the San Francisco market for each month during the past two years, and the average for the twelve months. The figures are presented because they convey a class of information that is often desired by dealers and others identified with the dairy industry. The figures represent cents and fractions of a cent per pound.

AVERAGE BUTTER AND CHEESE PRICES IN SAN FRANCISCO.

Month.	1903.		1904.	
	Butter.	Cheese.	Butter.	Cheese.
October	28.6	12.7	28.3	13.2
November	31.8	19.2	31.6	12.6
December	31.3	15.5	29.7	13.0
January	30.6	14.8	28.3	12.1
February	34.3	14.3	28.1	10.8
March	26.5	13.1	28.1	9.4
April	22.6	12.4	19.3	9.0
May	22.5	11.1	18.7	8.7
June	24.2	11.8	19.1	8.8
July	25.3	12.5	21.5	9.3
August	26.1	12.8	24.1	9.5
September	29.8	12.9	27.4	9.8
Average for twelve months	27.8	13.5	25.3	10.5

CONDENSED MILK.

During the past two years three new milk-condensing factories have been established in the State. One of these was destroyed by fire immediately after beginning operations. Two that were given in the list in our last report have discontinued business. The output of con-

densed milk and evaporated cream for each of the last six years is given in the table below, which gives the number of cases of forty-eight cans each :

Year.	Cases.	Year.	Cases.
1899.....	52,558	1902.....	146,860
1900.....	66,302	1903.....	126,874
1901.....	100,140	1904.....	186,905

CASEIN MANUFACTURE.

Since the last report made by the Bureau a new branch of the dairy business has been established in the State. We refer to the production of commercial casein. In the making of butter only the fat in the milk is utilized. In the skim-milk and buttermilk is left all the casein, amounting approximately to four per cent on the average. This casein, on account of its plastic, insoluble nature and the modifications its physical properties take on in combination with various chemicals, adapts it to a number of uses in the manufacturing arts, chief among which is its use as a sizing in making the higher grades of paper. The demand for casein, both in the Eastern States and for exportation to Europe, has reached California, with the result that a number of creameries in Humboldt County make the preparing of casein a feature. The residue, or whey, of skim-milk after the casein is removed still contains the sugar and albuminoids (which in some Eastern factories are removed and converted into commercial products), and is valuable for hog-feeding. The amount of casein produced during the year ending October 1, 1903, amounted to 34,440 pounds, and for the year ending October 1, 1904, to 138,280 pounds.

BUTTER PRODUCTION PER COW.

A matter of much inquiry among those identified with the dairy interests, and especially by teachers in agricultural schools, students of dairy affairs, and State and Federal officials, is as to what is the average production of butter per cow in the State. The impression seems to prevail that the average is low compared with other dairy States. The Dairy Bureau has been eager to secure a large amount of specific data on this question that it might present, but has found it next to impossible to get this information from the dairymen, owing to the fact that few seem to know what the total production of their herds is. The same is true of our efforts to secure some definite information about the breeding of the dairy cows of the State, there being apparently few of our dairymen who know anything about the breeding of their herds, or what constitutes a thoroughbred or a grade animal.

Recently the Bureau undertook to secure some data on the average production per cow through the creameries. A number of creameries throughout the State were asked by means of blanks to state the pounds

of butter-fat delivered in the course of a year by their patrons, and then to secure the number of cows the patron had who contributed to the butter-fat delivered to the creamery; but in this it failed, owing to the fact that the creamerymen reported that no regular number of cows were kept by their patrons, and that they were constantly adding to and selling from their herds.

Only a general statement can be risked as to the average production per cow. First, it may be stated that the variation is extremely wide. The Bureau has many instances on record where the average yearly production per cow in herds owned by dairymen who make cow-keeping a specialty is less than 110 pounds a year. It also has records where the average per cow exceeds 250 or even 300 pounds. Secondly, it might be stated that the average varies largely according to the particular district of the State as governed by the average intelligence of the dairymen and the feed conditions. Thus we find in Humboldt County, where they have an intelligent, painstaking class of dairymen and good feed conditions and long seasons, about 23,000 cows (after allowing for those that contribute the milk and cream used by the population) producing almost 4,000,000 pounds of butter, or an approximate average of 175 pounds per cow. This average is maintained fairly well, if not exceeded, throughout the Sacramento and San Joaquin valleys and south of the Tehachapi Mountains, where feed is abundant for a long period of the year. When we come to the hill regions along the coast we find a different condition. The variation among individual herds is very marked. In the noted dairy counties of Marin and Sonoma we find herds with a reported average of less than 120 pounds and others exceeding 250, the difference being accounted for in the breeding and selection of the cows and their care and feeding. In case of the records of twenty-four dairymen in one district, the average per cow is shown to be 131 pounds, the lowest herd averaging 92 pounds per cow, and the highest, a graded Jersey herd, 263 pounds. In the southern coast counties the average production is still lower, herds that exceed an average per cow of 150 pounds of butter being the exception, and from that amount the average ranges down to less than 100 pounds per cow.

The facts we have tried to present above are given to show the great waste resulting from the keeping of poor cows and improper care, and the great need on the part of the State to educate her dairymen in more progressive methods. It is a waste of effort to attempt to conduct a dairy business with cows which have an annual butter capacity of less than 150 pounds. By selection and breeding many dairymen are bringing the average of their herds up to over 200 pounds. To raise the present average through education is the greatest need of the dairy industry in California.

DAIRY EXPORTS.

The value of the dairy products exported from the port of San Francisco is shown in the table below. These products consist of butter, cheese, and condensed milk:

Country.	Butter.		Cheese.		Condensed Milk.	
	1903.	1904.	1903.	1904.	1903.	1904.
British Columbia	\$4,004	\$11,604	\$4,021	\$3,827	\$241	
Mexico	4,731	8,515	8,780	10,079	4,499	\$7,103
Guatemala	286	244	895	943	102	95
Salvador	142	58	218	128		
Nicaragua	90	63	81	133	30	69
Colombia	72	91	219	19	249	153
Ecuador	257	43	243	41	51	50
Peru	119	372	29	117	864	1,184
Chile		602		473	90	1,006
Costa Rica	117	239		121	396	359
Honduras	46	66	100	138	34	23
Russian China	230	290	1,059	322	261	1,850
Chinese Empire	7,728	4,503	29,923	22,458	25,383	24,409
Hongkong	2,246	730	29,675	22,344	15,667	9,344
Japan	68,014	18,498	8,901	6,248	135,550	146,797
Korea	3,064	3,520	435	490	6,250	3,045
British India	17		96	15	17,560	
Strait Settlements		23		53		6,435
Australasia			1,032	181	44	49
British Oceanica	465	65	91	39	343	362
French Oceanica	2,354	703	1,709	1,816	4,019	2,551
German Oceanica	95	10	304	199	120	116
Philippine Islands	332	10	944	614	3,121	46,095
Quebec, Ontario	31,618	17,939	675	447	445	600
Alaska		91,610		7,770		24,811
Hawaii	*159,749	98,480	*39,388	28,801	*120,686	89,166
Panama		22				84
Guam	152	231	28	14	337	181
Other countries	432		46		540	479
Totals	\$286,360	\$258,531	\$125,892	\$107,820	\$336,882	\$366,466

* Including Alaska.

The figures for the export of condensed milk in former years are not available, but the value of butter and cheese exported since 1894 is as follows:

Year.	Butter.	Cheese.	Year.	Butter.	Cheese.
1894	\$90,095	\$28,442	1899	\$99,417	\$65,965
1895	71,181	27,894	1900	*80,593	*63,509
1896	59,723	35,270	1901	*91,687	*60,736
1897	88,205	39,452	1902	167,936	83,172
1898	116,722	54,401			

* Does not include Hawaii.

ANNUAL VALUE OF THE DAIRY OUTPUT.

In former reports we have presented figures for the purpose of showing the annual value to the State of the various products of the dairy industry. The figures are mere estimates of the product upon average prices in the markets, without making allowance for the difference in

the grade of product. For this reason very conservative prices are used in the calculations. In accordance with this statement the following figures are presented:

1902-1903.

Value of 34,676,311 pounds of butter.....	\$8,669,077
Value of 7,141,637 pounds of cheese	856,996
Value of 126,874 cases of condensed milk.....	621,233
Value of milk and cream consumed	6,682,738
Value of calves from dairy cows.....	1,724,844
Value of pork produced on milk by-products.....	1,881,264
Total	\$20,436,152

1903-1904.

Value of 35,636,909 pounds of butter.....	\$8,374,673
Value of 6,133,898 pounds of cheese	613,898
Value of 186,905 cases condensed milk.....	747,620
Value of milk and cream consumed	7,016,872
Value of calves from dairy cows.....	1,820,864
Value of pork produced on milk by-products.....	1,801,640
Total	\$20,375,567

It should be stated that the prices on which these estimates are based are wholesale. When allowance for the vast amount of milk that producers sell at retail is taken into consideration, the conservatism of these figures becomes apparent. In general, prices for the last year ruled lower than for the preceding year.

INTERNATIONAL PURE-FOOD CONGRESS.

Under the auspices of the National Association of State Dairy and Food Departments, an organization whose membership comprises the dairy and food commissions of various States, a pure-food congress, in which other nations were invited to participate, was held at St. Louis, beginning September 26th. In view of the importance of this meeting and the fact that the Dairy Bureau was represented at only one of the previous annual conventions of the National Association, which was the one held at Portland, Or., in 1902, it was deemed advisable to send a representative to the International Congress at St. Louis, and accordingly the chairman of the Bureau was delegated as its representative.

To attempt a report of any details of this exceedingly interesting and important meeting would be impracticable here. It must suffice to state that the representative of the Bureau was impressed with the progress reported from other states and countries in the matter of food-control and the prevention of adulteration, while California is one of the few important states that has not undertaken any general effort in this direction. As in case of our own State, the adulteration of butter and cheese, which was the first to bring on the inauguration of food laws, has practically been suppressed in all the leading States. From dairy products these efforts extended to a State control of foods in gen-

eral, with the result that the Bureau's representative was surprised at the success other States have met with, while California, with little or no control of the food supply of her citizens, has become a market for foods that are not permissible in the States where prepared.

It was the discussion of a plan to reach these unprotected States through a Federal pure-food law that received most of the attention of the pure-food congress. The National Association of Dairy and Food Departments indorses the Hepburn pure-food bill, which passed the House of Representatives at the last session and which, with some amendments, is now pending in the Senate under the title of the Heyburn pure-food bill. The importance of this bill is so great to the food-consuming and food-producing interests of California, that in our estimation every effort should be made to have our delegation in Congress do all in its power to secure the enactment thereof. That the provisions of the bill may be better understood by the citizens of California, and that they may impress its importance upon their representatives in Congress, a copy of the bill, as it appears on the Senate file, is published in the Appendix.

CONCLUSION.

We regret that in the preparation of this report we have not been able to treat of more specific work performed by the State Dairy Bureau. An examination of the laws published in the Appendix will show the scope of the duties of the Bureau. The tendency of our citizens to live up to the laws has minimized the labor of the officers of the Bureau in prosecuting cases for their violation. They have, however, maintained a careful searching of the markets for any violations which might occur, in order that those who might be inclined to tamper with the laws which the Bureau must enforce may know that a careful watch is constantly maintained. In fact, we feel safe in stating that were it not for the vigilance that is kept up by the Bureau, the protection that is now afforded the producer of legitimate dairy products would in a measure be lost.

In view of the fact that the Bureau has proved itself thus useful to the dairy industry of the State, there is a prevailing wish among those identified with the dairy industry that its usefulness be extended, and that it be authorized by law to assist in the solution of several problems now confronting the dairy interests. First among these is the necessity for some measure of control of the sanitary conditions under which the dairies, creameries, and cheese factories in the State are conducted. The general tendency for dairymen to send all their milk to factories, to be made into butter and cheese, has been followed to a deplorable extent in the production of milk under unsanitary conditions that are in many instances revolting, to say nothing of the effect it has had in

bringing about a low average of quality in our dairy products. It is a fact, which every dairyman knows, that good butter and cheese can not be made from milk contaminated with filth; but under the public creamery system and the competition under which creameries operate, they are compelled to accept such milk as the dairymen offer, regardless of quality. It is not infrequent that the milk of cows immediately after giving birth, or from sick cows, is sent to the creameries and factories. Neither is attention to the age of milk or cream delivered, or its state of fermentation, considered. During the rainy season the udders of cows are permitted to drag in the mud and decayed manure of yards, and this filth drops into the pail while milking is going on. Calves are permitted to drink from milking pails, and the unconsumed portion is poured into the cans for delivery to the creamery. Barns are in some cases surrounded by a year's accumulation of manure and urine, for lack of drainage; and facilities for the proper cleaning of utensils are not available nor thought of. A system of control that will prevent this state of affairs is demanded by the creameries, cheese factories, and condensed-milk factories, and more especially by the consumers of milk in our cities. A law is therefore needed that will authorize the Dairy Bureau, or other authority, to enforce an improvement in the sanitary condition of the dairies and factories of dairy products. Such a law should be reasonably conservative to start with, to the end that it may compel the cleaning-up of the filthiest dairies, and not sweeping enough in its requirements to antagonize the better class of dairymen. If, during the next few years, the unsanitary dairies, through inspection and a campaign of education, could be brought up to the standard of the cleanest ones of to-day, commendable progress would be made, after which the sanitary requirements might be drawn still more closely, to the end that in the course of time the general, and in many cases overdrawn, complaint made by our cities that milk is produced in the country under unsanitary conditions that make it unfit for human food, would cease, and the quality of our butter, cheese, and condensed milk would improve to a degree that would be most profitable. This line of effort has been in practice in the State of Minnesota, with the result that the butter of that State, which is its principal dairy product, has preference in the markets of the East. Under this system inspectors are employed who are thoroughly conversant with advanced dairy methods, so that their work among the dairymen, creamerymen, and cheese-makers makes them a part of an educational system that has greatly assisted the advancement of better and more profitable methods of producing milk and its products. A similar effort has been demanded for California by her best class of dairymen and manufacturers of dairy products.

A matter that is much complained of by both producers of and

dealers in butter is the inconvenience resulting from a lack of uniformity in the packing of the butter that reaches the San Francisco market, which causes a loss to the producers. It is desired to bring about the use of a retail butter-package containing uniform weights, so that it would be adapted to any market in which it might be desired to sell the butter. In all the coast markets outside of San Francisco, prints containing one and two pounds are demanded, while for the San Francisco trade the butter is variously packed. Any surplus that may be on hand in this one market can not be disposed of to advantage where the regulation one- and two-pound prints prevail. Our dealers are a unit in desiring a legal regulation in regard to this matter. In fact, a law in relation to this has been enacted by the Legislature (Statutes of 1893, Chapter 137), but is held to be meaningless under its ambiguous phraseology. It is believed that if all producers were compelled to pack their butter in prints, upon which was marked the exact weight of butter contained therein, it would soon result in the general use of only the one- and two-pound prints. Under the present condition—of the desirability of retail dealers to undersell one another—has been brought about the tendency of placing various amounts of butter in the prints and great confusion in the packing of butter has followed, which producers and dealers hope to obviate. Such a law is now in force in Oregon, with the result that this convenient uniformity is maintained and was brought about with little friction between the producers and dealers and the officials.

To the desirability of amending the renovated butter act, so that dealers and producers of this class of butter may not have the alternative of branding it "process" butter, reference has already been made.

Reference has also been made to the growing tendency among butter-producers, especially among the creameries, to outdo each other in their efforts to incorporate an abnormal amount of water in their butter. It is one of the evils brought on by keen competition between rival creameries. This tendency on the part of our creameries can not be looked upon otherwise than as unfortunate, and if it can not be mutually corrected, a maximum standard for water allowable in butter should be established by law, as some States have already done. Creamerymen have most successfully opposed adulteration in the past, but when they seek to sell water at butter prices they are on the same level with those who insist upon selling oleomargarine for butter, or with those who substitute foreign oils for the butter-fat in cheese.

The misbranding of butter has developed much dissatisfaction among butter-purchasers. The general practice of marketing all California butter in small retail packages or "rolls" inclosed in wrappers bearing, among other things, the name of the brand and that of the producer and his location, has given rise to some misrepresentation in this

respect. Many of our creameries protect their brands by having them registered as trademarks, but this does not prevent the use of brands or expressions bearing local geographical names that are misleading. In numerous instances dealers use expressions on wrappers on Eastern butter (even if of inferior quality), for the purpose of conveying the impression that it was produced in certain districts in California where our best creamery goods are produced. Our producers of fine butter resent this imposition, and legislation to correct this abuse has been suggested.

FINANCIAL STATEMENT.

FIFTY-FOURTH FISCAL YEAR—JULY 1, 1902, TO JUNE 30, 1903.

Amount appropriated for fifty-fourth fiscal year.....	\$5,000 00
Expenses.	
Salary of Agent and Secretary.....	\$1,200 00
Salary of Assistant Secretary and Chemist.....	1,200 00
Traveling expenses of Agent and Secretary.....	706 65
Traveling expenses of Assistant Secretary and Chemist.....	147 50
Office rent.....	360 00
Postage stamps.....	74 00
Cheese-branding stencils.....	10 80
Laboratory supplies.....	9 72
Traveling expenses and per diem of members of Bureau.....	181 50
Services paid for per diem.....	247 55
Stationery and office supplies.....	57 96
Gas and water bills.....	44 60
Towel service.....	6 00
Press-clipping service.....	30 00
Telephone service.....	46 85
Janitor's services.....	45 20
Notary fees.....	6 00
Scavenger.....	3 00
Telegrams, expressage, and incidentals.....	21 80
Balance of appropriation unexpended.....	600 87
	\$5,000 00

FIFTY-FIFTH FISCAL YEAR—JULY 1, 1903, TO JUNE 30, 1904.

Amount appropriated for fifty-fifth fiscal year.....	\$5,000 00
Expenses.	
Salary of Agent and Secretary.....	\$1,200 00
Salary of Assistant Secretary and Chemist.....	1,200 00
Traveling expenses of Agent and Secretary.....	795 40
Traveling expenses of Assistant Secretary and Chemist.....	48 55
Office rent.....	360 00
Postage stamps.....	307 00
Cheese-branding stencils.....	3 75
Laboratory supplies.....	17 97
Traveling expenses and per diem of members of Bureau.....	132 00
Services paid for per diem.....	78 10
Stationery and office supplies.....	17 75
Gas and water bills.....	30 70
Towel service.....	6 00
Press-clipping service.....	36 00
Telephone service.....	37 05
Janitor's services.....	48 00
Notary fees.....	6 00
Scavenger.....	3 00
Carpet for office.....	55 55
State Printing Office.....	105 00
Expressage, telegrams, and incidentals.....	20 72
Balance of appropriation unexpended.....	491 46
	\$5,000 00

REPORT OF THE CHEMIST.

To the State Dairy Bureau:

GENTLEMEN: I have the honor to submit the following report of work performed in the laboratory during the past two years. In addition to this work, which consumed but a small portion of my time, I have performed the bulk of the work in the office and also acted as the inspector for the Bureau for the cities of San Francisco and Oakland.

In case of goods suspected of being oleomargarine or adulterated with foreign fats, only twelve samples have been submitted for analysis. These were examined by the Reichert-Wollny method. The parties from whom they were taken or by whom submitted and the results are given below:

Sample
No.

1. From the Original "Creamerie," San Francisco.....	Reichert number, 2.42.	Pure butter.
7. Submitted by J. M. Thomas, Agent and Secretary.....	Reichert number, 1.8.	Oleomargarine;
18. Submitted by J. M. Thomas, Agent and Secretary.....	Reichert number, 23.6.	[no color. Pure butter.
19. Submitted by J. M. Thomas, Agent and Secretary.....	Reichert number, 25.2.	Pure butter.
23. Submitted by J. M. Thomas, Agent and Secretary.....	Reichert number, 22.3.	Pure butter.
26. Submitted by L. H. Barker, Palo Alto.....	Reichert number, 26.	Pure butter.
29. Submitted by F. Pinschower, Los Angeles.....	Reichert number, 24.6.	Pure butter.
42. Submitted by J. M. Thomas, Agent and Secretary.....	Reichert number, .8.	Oleomargarine; [colored.
45. Submitted by A. Hovey, San Francisco.....	Reichert number, 25.2.	Pure butter.
62. Submitted by J. M. Thomas, Agent and Secretary.....	Reichert number, 24.3.	Pure butter.
61. From E. B. & A. L. Stone Co., Oakland.....	Reichert number, 1.3.	Oleomargarine;
63. From Westerfield's Restaurant, San Francisco.....	Reichert number, 25.5.	[no color. Pure butter.

The following samples were submitted to tests to ascertain if the same were renovated butter, with results noted:

Sample
No.

2. Taken from Elliott Brothers, San Francisco.....	Not renovated.
3. Submitted by Roussel & Davidson, San Francisco.....	Not renovated.
4. Taken from J. C. Robinson, San Francisco.....	Renovated.
5. Taken from C. F. Suss, San Francisco.....	Renovated.
6. Taken from C. F. Suss, San Francisco.....	Renovated.
13. Received from the State Hospital, Napa.....	Renovated.
14. Taken from the State Hospital, Napa.....	Not renovated.
15. Submitted by G. G. Knox, Sacramento.....	Not renovated.
16. Submitted by G. G. Knox, Sacramento.....	Not renovated.

Sample No.		
24.	Taken from Roth, Blum & Co., San Francisco	[clusive, Result not con-
30.	Taken from H. Ellingson, Oakland	Renovated.
31.	Taken from F. Klinkeberg, Oakland	Not renovated.
32.	Submitted by J. H. Newbarrer & Co., San Francisco	Not renovated.
35.	Taken from State Hospital, Ukiah	Not renovated.
37.	Taken from Home for Feeble-Minded, Glen Ellen	Not renovated.
39.	Taken from State Hospital, Napa	Not renovated.
47.	Taken from Davis Cash Store, Oakland	Not renovated.
48.	Taken from Davis Cash Store, Oakland	Not renovated.

In the following samples of cheese the percentage of fat was determined, to ascertain if the amount contained was according to the grade of cheese as labeled:

Sample No.		Per Cent of Fat.
12.	Submitted by J. M. Thomas, Agent and Secretary	33.2
25.	Submitted by J. M. Thomas, Agent and Secretary	22.0
27.	Submitted by J. M. Thomas, Agent and Secretary	33.6
28.	Submitted by J. M. Thomas, Agent and Secretary	21.8
36.	Taken from Home for Feeble-Minded, Glen Ellen	33.75
38.	Taken from State Hospital, Napa	38.34
40.	Taken from Star Grocery, Stockton	35.12
41.	Taken from State Hospital, Stockton	32.8
43.	Submitted by Wheaton, Pond & Harrold, San Francisco	31.9
44.	Submitted by Roussel & Davidson, San Francisco	34.7
46.	Submitted by Roussel & Davidson, San Francisco	30.9
50.	Submitted by F. B. Haight, San Francisco	31.7
51.	Submitted by F. B. Haight, San Francisco	32.4
52.	Submitted by F. B. Haight, San Francisco	35.4
53.	Submitted by Schulz, Niggle & Co., San Francisco	33.7

In case of the samples above that were shown to contain less than 30 per cent of fat, all were labeled as "half-skim cheese," as required by the law.

Upon the request of different persons the water contained in samples of butter was determined, with the following results:

Sample No.		Per Cent of Water.
8.	Submitted by Minnewawa Creamery, Fresno	13.44
9.	Submitted by Minnewawa Creamery, Fresno	11.82
10.	Submitted by Minnewawa Creamery, Fresno	7.98
11.	Submitted by Minnewawa Creamery, Fresno	10.08
33.	Submitted by Capital Creamery, Ferndale	10.18
53.	Submitted by A. Jensen, Ferndale	14.51
54.	Submitted by Brigham, Hoppe & Co., San Francisco	26.7
56.	Submitted by Wheaton, Pond & Harrold, San Francisco	13.91
57.	Submitted by Brigham, Hoppe & Co., San Francisco	23.95
58.	Submitted by Brigham, Hoppe & Co., San Francisco	23.05
59.	Submitted by Brigham, Hoppe & Co., San Francisco	21.48
60.	Submitted by Dairymen's Union, San Francisco	10.49
61.	Submitted by Capital Creamery, Ferndale	11.98
62.	Submitted by A. L. Lundy Co., San Francisco	13.22
63.	Submitted by Schulz, Niggle & Co., San Francisco	12.37
64.	Submitted by Burdell Creamery, Petaluma	12.0

The results of the water determinations given above are interesting, in view of the wide variation shown in water-content of butter as made by different producers. That some of the butter from which the samples reported upon have been taken was intentionally manipulated so as to incorporate an excessive amount of water seems apparent. This amounts to the same thing as adulteration, and is not permitted by law in several States or under the Federal Internal Revenue laws.

The following samples have been examined for the purposes specified:

No. 20. Condensed milk, submitted by Getz Brothers, San Francisco; total solids, 25.37 per cent.

No. 21. Condensed milk, submitted by Getz Brothers, San Francisco; total solids, 18.44 per cent.

No. 22. Condensed milk, submitted by Getz Brothers, San Francisco; total solids, 22.17 per cent.

No. 34. Butter, submitted by F. Pinschower, Los Angeles; showed presence of no formaldehyde or boron compounds.

No. 17. Cheese, submitted by Wheaton, Pond & Harrold, San Francisco, for presence of tyrotoxicon; results, negative.

No. 49. Milk, submitted by the United Milk Co., San Francisco. Examined for formaldehyde and boron compounds; negative.

No. 55. Evaporated cream, submitted by H. S. Shelton, San Francisco; showed 6.5 per cent of butter fat.

During the two years covered by this report 176 samples of milk, skim-milk, and cream have been tested for butter-fat for the accommodation of persons requesting it.

Respectfully,

WM. H. SAYLOR, Chemist.

CREAMERIES IN CALIFORNIA.

Name of Creamery.	Management.	Postoffice.	County.
Oakland Cream Depot	J. A. Bliss, president	Oakland	Alameda.
Livermore Creamery	A. Young, manager	Livermore	Alameda.
Jersey Creamery	F. E. Heath, mgr.	Alameda	Alameda.
California Creamery	J. H. Maurer, mgr.	Oakland	Alameda.
Santa Rita Creamery	Wm. Hanna, prop.	Pleasanton	Alameda.
Eden Creamery	C. Oliver, secretary	Mt. Eden	Alameda.
Royal Creamery	Geo. B. M. Gray, prop.	Oakland	Alameda.
Ione Creamery	C. C. Prouty, mgr.	Ione	Amador.
Colusa Creamery	G. W. Lucy, mgr.	Colusa	Colusa.
Banner Creamery	D. Woodruff, sec'y	Smith River	Del Norte.
Elk Valley Creamery	Giacomini & Cadra	Crescent City	Del Norte.
Fort Dick Creamery	Geo. E. Tryon, mgr.	Crescent City	Del Norte.
Crescent Creamery	Wm. Westbrook, sec.	Smith River	Del Norte.
Crystal Springs Creamery	Crystal Sp'gs Ctry Co.	Crescent City	Del Norte.
Danish Creamery	J. R. Murphy, mgr.	Fresno	Fresno.
San Joaquin Creamery	A. B. Evans, mgr.	Fresno	Fresno.
Selma Coöperative Creamery	Jesse Durham, mgr.	Selma	Fresno.
Orland Creamery	E. F. Hale, prop.	Orland	Glenn.
Eel River Creamery	C. De Carli, secretary	Waddington	Humboldt.
Riverside Creamery	Harry Caltoft, mgr.	Ferndale	Humboldt.
Grizzly Bluff Creamery	James Lawson, mgr.	Grizzly Bluff	Humboldt.
Coldbrook Creamery	Edw. Pond, manager	Loleta	Humboldt.
Queen City Creamery	H. Samuels, mgr.	Ferndale	Humboldt.
Sunset Creamery	C. Thompson, mgr.	Loleta	Humboldt.
Excelsior Creamery	H. M. Bonnicksen, mgr.	Ferndale	Humboldt.
Capital Creamery	W. G. Branstetter, mgr.	Waddington	Humboldt.
Loleta Creamery	John Hansen, mgr.	Loleta	Humboldt.
Independent Creamery	Samuels Bros., prop.	Ferndale	Humboldt.
Cream Valley Creamery	Kelly Bros., prop.	Ferndale	Humboldt.
Silver Star Creamery	F. W. Andreason, mgr	Ferndale	Humboldt.
Pioneer Creamery	A. Kausen, manager	Ferndale	Humboldt.
Ferndale Creamery	F. Madsen, manager	Ferndale	Humboldt.
Crown Creamery	J. M. Jacobson, mgr.	Ferndale	Humboldt.
Cold Spring Creamery	H. A. Tyrell, mgr.	Ferndale	Humboldt.
Alton Creamery	F. W. Luther, sec'y	Alton	Humboldt.
Diamond Crystal Creamery	Petersen & Lorenzen	Arcata	Humboldt.
Arcata Creamery	N. Hough, secretary	Arcata	Humboldt.
Premium Creamery	Peter Johansen, mgr.	Arcata	Humboldt.
Minor Creamery	Isaac Minor, prop.	McKinleyville	Humboldt.
Central Creamery	A. Jensen, proprietor	Ferndale	Humboldt.
Gilt Edge Creamery	A. Matlick, prop.	Bishop	Inyo.
Kern County Creamery	H. R. Peacock, prop.	Bakersfield	Kern.
Kings County Creamery	F. J. Peacock, mgr.	Hanford	Kings.
Lucerne Creamery	J. W. Sage, secretary	Hanford	Kings.
Clear Lake Creamery	L. Hendricks, mgr.	Lakeport	Lake.
Susanville Creamery	J. L. Borrette, mgr.	Susanville	Lassen.
Honey Lake Creamery	Spoon Bros., prop.	Spoonville	Lassen.
Susanville Creamery	Alexander & Knoch	Susanville	Lassen.
Maple Grove Creamery	E. Burr, manager	Los Angeles	Los Angeles.
Smith's Creamery	Geo. A. Smith, prop.	Los Angeles	Los Angeles.

CREAMERIES IN CALIFORNIA—Continued.

Name of Creamery.	Management.	Postoffice.	County.
Santa Monica Creamery	H. Michel, prop.	Santa Monica	Los Angeles.
Bingham Creamery	H. A. Bingham, prop.	Los Angeles	Los Angeles.
Gardena Creamery	R. W. Davis, mgr.	Gardena	Los Angeles.
Downey Coöperative Cre'y	T. R. Crawford, sec'y	Downey	Los Angeles.
Belle Vernon Farms Cre'y	C. H. Sessions, pres.	Los Angeles	Los Angeles.
Crown Creamery	J. O. Blakeley, mgr.	Hynes	Los Angeles.
Oak Hill Creamery	Carl Raab, manager	El Monte	Los Angeles.
Hynes Coöperative Cre'y	H. W. McKelvey, pres.	Hynes	Los Angeles.
Eureka Coöperative Cre'y	W. A. Blim, mgr.	Compton	Los Angeles.
Home Creamery	Mrs. J. S. Hamilton	Point Reyes	Marin.
Mailliard Creamery	Jos. Mailliard, mgr.	San Geronimo	Marin.
Fallon Creamery	Roussel & Davidson, lessees	Fallon	Marin.
Rocky Canyon Creamery	Paul Dado, manager	Tomales	Marin.
Tomales Creamery	A. L. Lundy Co., prp.	Tomales	Marin.
Point Arena Creamery	J. C. Halliday, sec'y	Point Arena	Mendocino.
Manchester Creamery	M. S. Scott, secretary	Manchester	Mendocino.
Bridgeport Creamery	J. M. Hall, secretary	Miller	Mendocino.
Fountain City Creamery	R. L. King, secretary	Merced	Merced.
Los Banos Creamery	Murphy & Paul, less.	Los Banos	Merced.
Dos Palos Creamery	Russell Bros., lessees	Dos Palos	Merced.
Salinas Creamery	C. J. Whisman, sec.	Salinas	Monterey.
Castroville Creamery	L. Griffin, secretary	Castroville	Monterey.
Del Monte Creamery	Mrs. Kate Hatton, proprietor	Monterey	Monterey.
Santa Lucia Creamery	Spreckels Sugar Co.	Salinas	Monterey.
Taplin Creamery	Taplin Bros., prop.	St. Helena	Napa.
McFarland Jersey Creamery	Mrs. S. J. McFarland	Napa	Napa.
Huichichi Creamery	Chas. Fillippini, pro.	Napa	Napa.
Penn Valley Creamery	F. A. Horton, sec'y	Rough & Ready	Nevada.
Delhi Creamery	Wilson Bros., prop.	Santa Ana	Orange.
Santa Ana Creamery	Ahlers & East, prop.	Santa Ana	Orange.
Westminster Creamery	Walton & Thompson, proprietors	Westminster	Orange.
Oak Leaf Creamery	P. A. Raab, prop.	Bolsa	Orange.
Taylorville Creamery	E. F. Koken, mgr.	Taylorville	Plumas.
Riverside Creamery	J. W. Chase, prop.	Arlington	Riverside.
Imperial Creamery	W. G. Vosberg, mgr.	San Jacinto	Riverside.
Glandale Creamery	F. W. Ehrhardt, sec.	Franklin	Sacramento.
Elk Grove Creamery	G. M. Colton, prop.	Elk Grove	Sacramento.
Crystal Creamery	G. G. Knox, manager	Sacramento	Sacramento.
The "Creamerie"	C. F. Schwilk, mgr.	Sacramento	Sacramento.
Star Creamery	W. H. Nichols, mgr.	Courtland	Sacramento.
Isleton Creamery	A. L. Lundy Co., less.	Isleton	Sacramento.
Hollister Creamery	P. J. Dooling, sec'y	Hollister	San Benito.
Hage's Imperial Creamery	W. B. Hage, prop.	Imperial	San Diego.
New England Creamery	W. B. Hage, prop.	San Diego	San Diego.
San Francisco Cream Depot	Murphy & Paul, prop.	San Francisco	San Francisco.
San Joaquin Creamery	F. H. Arnsburger, manager	Stockton	San Joaquin.
Stockton Creamery	C. B. Stowe, mgr.	Stockton	San Joaquin.
Lockeford Creamery	W. J. Jones, mgr.	Lockeford	San Joaquin.
Pescadero Creamery	J. C. Williamson, secretary	Pescadero	San Mateo.
Lompoc Creamery	McAdam & Smith, les.	Lompoc	Santa Barbara.
Moretti Creamery	Jos. Moretti, prop.	Santa Maria	Santa Barbara.
San José Creamery	G. E. Graft, prop.	San José	Santa Clara.

CREAMERIES IN CALIFORNIA—Continued.

Name of Creamery.	Management.	Postoffice.	County.
Model Creamery	Geo. Newman, prop.	San José	Santa Clara.
Wilder Creamery	D. D. Wilder, prop.	Santa Cruz	Santa Cruz.
Seaside Creamery	J. T. Stone, prop.	Santa Cruz	Santa Cruz.
Watsonville Creamery	W. A. Trafton, mgr.	Watsonville	Santa Cruz.
Walker Creamery	J. A. Walker & Sons, proprietors	Etna	Siskiyou.
Siskiyou Creamery	R. H. Burton, mgr.	Greenview	Siskiyou.
Edgewood Creamery	E. B. Cavanaugh, mgr.	Edgewood	Siskiyou.
Dixon Creamery	Fred Agee, secretary	Dixon	Solano.
Hicks Valley Creamery	Brown & Brandon, proprietors	Petaluma	Sonoma.
Denman Creamery	J. R. Denman, prop.	Petaluma	Sonoma.
Bodega Creamery	J. D. Williams, mgr.	Bodega	Sonoma.
Rule Creamery	Chas. Rule, prop.	Duncan's Mills	Sonoma.
Denman Creamery	J. R. Denman, prop.	Bloomfield	Sonoma.
Burdell Creamery	J. B. Burdell, prop.	Petaluma	Sonoma.
New Era Creamery	A. M. Williams, sec.	Newman	Stanislaus.
Ceres Coop. Creamery	S. J. Irvine, sec'ty	Ceres	Stanislaus.
Oakdale Creamery	H. M. Crow, prop.	Oakdale	Stanislaus.
Acme Creamery	Oakland Cream Depot, lessees	Newman	Stanislaus.
Westland Creamery	Hollister & Brough, proprietors	Newman	Stanislaus.
Modesto Creamery	G. T. McCabe, mgr.	Modesto	Stanislaus.
Vernon Creamery	S. N. Nash, prop.	Vernon	Sutter.
Nicolaus Creamery	S. N. Nash, Prop.	Nicolaus	Sutter.
Vina Creamery	Stanford Univ. prop.	Vina	Tehama.
Good Luck Creamery	J. H. Frew, prop.	Tulare	Tulare.
Valley Creamery	S. J. Scott, manager	Visalia	Tulare.
Tulare Coöperative Cr'y	W. B. Cartmill, mgr.	Tulare	Tulare.
Dinuba Creamery	Wilson Bros., less.	Dinuba	Tulare.
Sunflower Creamery	Ridgeway Bros., prop.	Poplar	Tulare.
Woodland Creamery	H. S. Joslyn, sec'ty	Woodland	Yolo.
Pozzi Creamery	R. Pozzi proprietor	Marysville	Yuba.

NOTE.—The list above contains only the names of creameries that have reported to the Dairy Bureau an annual output of over 50,000 pounds of butter.

CONDENSED MILK FACTORIES.

Pacific Creamery Co.	Geo. H. Stewart, mgr.	Buena Park	Orange.
Coldbrook Creameries Co.	Edward Pond, mgr.	Loleta	Orange.
Valley Condensed Milk Co.	S. J. Scott, mgr.	Visalia	Tulare.
Cal. Condensed Milk Co.	Chas. Egbert, mgr.	Hanford	Kings.
Alpine Evap't'd Cream Co.	John Myenberg, mgr.	Hollister	San Benito.

CHEESE MANUFACTURERS.

Register No.	Name.	Postoffice.	County.
2.	Novato Land Company	Novato	Marin.
3.	Anselmi & Williams	Gonzales	Monterey.
4.	Agostini & Beffa	Salinas	Monterey.
6.	J. & P. O'Connor	San Luis Obispo	San Luis Obispo.
8.	Pescadero Creamery	Pescadero	San Mateo.
9.	Carlew R. Wilson	Gilroy	Santa Clara.
15.	Alex Watson	Gilroy	Santa Clara.
22.	Richard Brem	Gilroy	Santa Clara.
24.	Geo. F. Mitchell	Hollister	San Benito.
29.	J. P. Sargent	Sargents	Santa Clara.
33.	James Fillipini	Coast	Santa Cruz.
37.	Crown Cheese Factory	Upper Lake	Lake.
38.	A. B. Hasbrouck	Musick	San Luis Obispo.
40.	Y. Malarin	Salinas	Monterey.
42.	R. Eschenberg	Gilroy	Santa Clara.
44.	Anchor Cheese Factory	Compton	Los Angeles.
48.	John Burns	Nicolaus	Sutter.
49.	Horace Nelson	Purissima	San Mateo.
52.	James Braghetti	Pescadero	San Mateo.
56.	V. Mattei	Pescadero	San Mateo.
57.	F. Vile	San Felipe	Santa Clara.
58.	Gottoni & Foletta	Chualar	Monterey.
61.	Clark S. Putnam	San Felipe	Santa Clara.
65.	J. C. Zuck	Gilroy	Santa Clara.
66.	C. F. Roth	Nicolaus	Sutter.
68.	Frank Muller & Bro.	Sonoma	Sonoma.
69.	Fred Neunschwander	Napa	Napa.
70.	R. Nichols	Sheldon	Sacramento.
73.	Bonzani & Cattini	Pescadero	San Mateo.
78.	D. Pedrazzi	Carmel	Monterey.
81.	Respini & Moretti	Santa Cruz	Santa Cruz.
86.	Morris Sheiber	Sacramento	Sacramento.
87.	P. Scaroni & Co.	Santa Cruz	Santa Cruz.
88.	Frank Pierce	Pismo	San Luis Obispo.
90.	R. E. Steel	Pescadero	San Mateo.
92.	George Bryte	Sacramento	Sacramento.
93.	Ashland Cheese Factory	Sacramento	Sacramento.
96.	Ambrose Gianoni	Coast	Santa Cruz.
98.	Pomponi Cheese Factory	Pescadero	San Mateo.
101.	Pigeon Point Cheese Factory	Pescadero	San Mateo.
104.	Amos Lester	Gilroy	Santa Clara.
106.	Ellis & Son	Gilroy	Santa Clara.
108.	Hopland Cheese Factory	Hopland	Mendocino.
110.	John V. Sousa	San Gregorio	San Mateo.
117.	Jos. Saner & Bro.	Galt	Sacramento.
118.	Gobby Bros.	Fresno	Fresno.
120.	J. D. Enright	Santa Cruz	Santa Cruz.
121.	Sheiber Bros.	Nicolaus	Sutter.
124.	P. Castillon	Gilroy	Santa Clara.
134.	M. S. Nunes	Castroville	Monterey.
137.	Orestimba Cheese Factory	Crow's Landing	Stanislaus.

CHEESE MANUFACTURERS—Continued.

Register No.	Name.	Postoffice.	County.
139.	James Lonstalet	Gilroy	Santa Clara.
141.	A. Badasci	Gonzales	Monterey.
143.	Louis Dotta	Pescadero	San Mateo.
145.	A. Saner	Cosumnes	Sacramento.
146.	Balty Schular	Cosumnes	Sacramento.
149.	C. Trought	Carlisle	Fresno.
157.	L. Ottolini	Tres Pinos	San Benito.
158.	Leoni Bros.	Fresno	Fresno.
163.	J. Joaquin	San Gregorio	San Mateo.
166.	B. Cavalli	La Honda	San Mateo.
172.	P. Gobbini	Halfmoon Bay	San Mateo.
175.	Herman Piper	Bakersfield	Kern.
176.	C. Bizzini	San Lucas	Monterey.
178.	Fairview Cheese Factory	Round Valley	Inyo.
179.	John Mulligan	San Juan	San Benito.
183.	Bolla & Co.	Petaluma	Sonoma.
184.	A. Rodoni	Pescadero	San Mateo.
188.	Blacttler Bros.	Salinas	Monterey.
189.	Jos. Gwerder	Ryde	Sacramento.
193.	John Offutt	Petaluma	Sonoma.
195.	Peter Seigerist	Sonoma	Sonoma.
197.	Thomas Reddington	Vernon	Sutter.
198.	Frank Miller	San Pablo	Contra Costa.
204.	Wm. Murray	Sonoma	Sonoma.
209.	Kronemacher & Kohler	Sacramento	Sacramento.
211.	Allen Matlick	Bishop	Inyo.
221.	Oliver Orr	San Felipe	Santa Clara.
223.	Eugene Daneri	Halfmoon Bay	San Mateo.
225.	Jos. Felder	Sonoma	Sonoma.
227.	S. Reibli	Sonoma	Sonoma.
230.	Mahone Bros.	Vernon	Sutter.
231.	B. F. Gould	Soledad	Monterey.
232.	Patrick Doyle	Vernon	Sutter.
234.	August Surtman	San Gregorio	San Mateo.
239.	M. F. McNamara	Verona	Sutter.
242.	Respini & Moretti	Santa Cruz	Santa Cruz.
243.	Wm. Armes	Beckwith	Plumas.
247.	Ritter Bros.	Sheldon	Sacramento.
250.	G. Lanini	Gonzales	Monterey.
251.	J. B. Reibli	Sonoma	Sonoma.
254.	E. S. Waters	King City	Monterey.
259.	Ramelli & Co.	Gonzales	Monterey.
260.	M. LaFranchi	Santa Rosa	Sonoma.
262.	James McCormick	Halfmoon Bay	San Mateo.
268.	C. Bondietti	Salinas	Monterey.
271.	Luis E. Gobby	Fresno	Fresno.
272.	Levy Bros.	Pescadero	San Mateo.
278.	Roethlisberger & Grasshoff	Novato	Marin.
279.	J. E. Reid	Kirkwood	Tehama.
281.	Chas. P. Warburton	Hollister	San Benito.
284.	C. Badasci	Watsonville	Santa Cruz.
285.	Chas. Streng	Sonoma	Sonoma.
289.	G. A. Pedrazzi	Hollister	San Benito.
292.	Spreckels Sugar Co.	Gilroy	Santa Clara.
304.	M. Ryan	Hollister	San Benito.
317.	D. McClosky	Hollister	San Benito.

CHEESE MANUFACTURERS—Continued.

Register No.	Name.	Postoffice.	County.
318.	Enos Fontes	Lobetus	San Mateo.
319.	Wm. E. Bunker	Crow's Landing	Stanislaus.
320.	J. B. Crow	Crow's Landing	Stanislaus.
321.	T. E. Roe	San Gregorio	San Mateo.
328.	Foletta Bros.	Swanton	Santa Cruz.
329.	Ryan & Mayock	Gilroy	Santa Clara.
333.	Somavia Bros.	Gonzales	Monterey.
334.	M. Isidoro	Pescadero	San Mateo.
341.	T. R. Denison	Hanford	Kings.
342.	Paraiso Cheese Factory	Soledad	Monterey.
343.	Eureka Coöperative Creamery Co.	Compton	Los Angeles.
344.	Lombardi & Foletti	Pescadero	San Mateo.
345.	C. B. Riebli	Petaluma	Sonoma.
346.	Ferreira & Silva	Halfmoon Bay	San Mateo.
347.	Antone M. Medeiros	Pescadero	San Mateo.
348.	Keechler Bros.	Sonoma	Sonoma.
349.	Peter Schluchinger	Sonoma	Sonoma.
350.	A. P. Ramos	San Mateo	San Mateo.
351.	Manuel P. Simas	Halfmoon Bay	San Mateo.
352.	B. G. Sargenti	Los Banos	Merced.
353.	Frank Schibig	Verona	Sutter.
354.	Minbini & Pestilichi	Crow's Landing	Stanislaus.
355.	Sunset Cream and Butter Co.	San Francisco	San Francisco.
356.	G. N. Parker	Nicolaus	Sutter.
357.	W. H. Thompson	Boca	Nevada.
358.	San Joaquin Ice Co.	Fresno	Fresno.
359.	J. Vosti	Gonzales	Monterey.
360.	M. Hotchkiss	Lake City	Modoc.
361.	G. Martella	Guernsey	Kings.
362.	B. Martella	Armona	Kings.
363.	V. Marcetti	Gonzales	Monterey.
364.	Egidio Martini	Halfmoon Bay	San Mateo.
365.	Hickmot Asparagus Canning Co.	Bouldin Island	San Joaquin.
366.	L. Moretti	Santa Cruz	Santa Cruz.
367.	Jost. Scheiber	Plantation	Sonoma.
368.	Zanini & Tomasetti	Crow's Landing	Stanislaus.
369.	Warburton & Weldy	Modesto	Stanislaus.
370.	Kings County Cheese Factory	Hanford	Kings.
371.	Cotta & Gittonini	Gonzales	Monterey.
372.	M. L. Morris	Crow's Landing	Stanislaus.
373.	Fantazia & Machado	Halfmoon Bay	San Mateo.
374.	F. E. Shore	Hollister	San Benito.
375.	W. P. Castle	Palo Alto	Santa Clara.
376.	Bailey Bros.	Etna	Siskiyou.
377.	H. C. Watson	Bieber	Lassen.
378.	E. Ghidossi	La Honda	San Mateo.
379.	Mrs. W. S. Burr	Picard	Siskiyou.
380.	Panziera Brothers	Gonzales	Monterey.
381.	O. P. Smith	Stony Ford	Colusa.
382.	Fred Halliker	Verona	Sutter.
383.	Riauda & Francisconi	Gonzales	Monterey.

NOTE.—The list above comprises names of cheese-makers who have reported their output to the Dairy Bureau, or are otherwise known to be in business.

APPENDIX.

LAW RELATIVE TO BUTTER AND CHEESE.

AN ACT TO PREVENT DECEPTION IN THE MANUFACTURE AND SALE OF BUTTER AND CHEESE, TO SECURE ITS ENFORCEMENT, AND TO APPROPRIATE MONEY THEREFOR.

[Approved March 4, 1897. Stats. 1897, p. 65.]

The people of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. That for the purposes of this Act, every article, substance, or compound, other than that produced from pure milk or cream from the same, made in the semblance of butter, and designed to be used as a substitute for butter made from pure milk or cream from the same, is hereby declared to be imitation butter; and that for the purposes of this Act every article, substance, or compound, other than that produced from pure milk or cream from the same, made in the semblance of cheese, and designed to be used as substitute for cheese made from pure milk or cream from the same, is hereby declared to be imitation cheese; *provided*, that the use of salt, rennet, and harmless coloring matter for coloring the product of pure milk or cream shall not be construed to render such product an imitation; *and provided*, that nothing in this section shall prevent the use of pure skimmed milk in the manufacture of cheese.

SEC. 2: No person, by himself or his agents or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, or use, or serve to patrons, guests, boarders, or inmates, in any hotel, eating-house, restaurant, public conveyance or boarding-house, or public or private hospital, asylum, or eleemosynary or penal institution, any article, product, or compound made wholly or partly out of any fat, oil, or oleaginous substance or compound thereof, not produced directly and at the time of manufacture from unadulterated milk or cream from the same, which article, product, or compound shall be colored in imitation of butter or cheese produced from unadulterated milk or cream from the same; *provided*, that nothing in this section shall be construed to prohibit the manufacture or sale, under the regulations hereinafter provided, of substances or compounds designed to be used as an imitation or as a substitute for butter or cheese made

from pure milk or cream from the same, in a separate and distinct form and in such a manner as will advise the consumer of its real character, free from coloration or ingredients that cause it to look like butter or cheese made from pure milk or cream, the product of the dairy.

SEC. 3. Each person, who, by himself or another, lawfully manufactures any substance designed to be used as a substitute for butter or cheese, shall mark by branding, stamping, or stenciling upon the top and sides of each tub, firkin, box, or other package in which such article shall be kept, and in which it shall be removed from the place where it is produced, in a clear and durable manner, in the English language, the words "substitute for butter," or "substitute for cheese," as the case may be, in printed letters in plain roman type, each of which shall not be less than one inch in height by one half inch in width, and in addition to the above shall prepare a statement, printed in plain roman type, of a size not smaller than pica, stating in the English language its name, and the name and address of the manufacturer, the name of the place where manufactured or put up, and also the names and actual percentages of the various ingredients used in the manufacture of such imitation butter or imitation cheese; and shall place a copy of said statement within and upon the contents of each tub, firkin, box, or other package, and next to that portion of each tub, firkin, box, or other package, as is commonly and most conveniently opened; and shall label the top and sides of each tub, firkin, box, or other package by affixing thereto a copy of said statement, in such manner, however, as not to cover the whole or any part of said mark of "substitute for butter," or "substitute for cheese."

SEC. 4. No person, by himself or another, shall knowingly ship, consign, or forward by any common carrier, whether public or private, any substance designed to be used as a substitute for butter or cheese, unless the same be marked and contain a copy of the statement, and be labeled as provided by section three of this Act; and no carrier shall knowingly receive the same for the purpose of forwarding or transporting, unless it shall be manufactured, marked, and labeled as hereinbefore provided, consigned, and by the carrier receipted for by its true name; *provided*, that this Act shall not apply to any goods in transit between foreign States and across the State of California.

SEC. 5. No person or his agent shall knowingly have in his possession or under his control any substance designed to be used as a substitute for butter and cheese, unless the tub, firkin, box, or other package containing the same shall be clearly and durably marked and contain a copy of the statement, and be labeled as provided by section three of this Act; and if the tub, firkin, box, or other package be opened, then a copy of the statement described in section three of this Act shall be kept with its face up, upon the exposed contents of said tub, firkin,

box, or other package; *provided*, that this section shall not be deemed to apply to persons who have the same in their possession for the actual consumption of themselves or family.

SEC. 6. No person, by himself or another, shall sell, or offer for sale, or take orders for the future delivery of, any substance designed to be used as a substitute for butter or cheese, under the name of or under the pretense that the same is butter or cheese; and no person, by himself or another, shall sell any substance designed to be used as a substitute for butter or cheese, unless he shall inform the purchaser distinctly, at the time of the sale, that the same is a substitute for butter or cheese, as the case may be, and shall deliver to the purchaser, at the time of the sale, a separate and distinct copy of the statement described in section three of this Act; and no person shall use in any way, in connection or association with the sale, or exposure for sale, or advertisement, of any substance designed to be used as a substitute for butter or cheese, the words "butterine," "creamery," or "dairy," or the representation of any breed of dairy cattle, or any combination of such words and representation, or any other words or symbols, or combinations thereof, commonly used by the dairy industry in the sale of butter or cheese.

SEC. 7. No keeper or proprietor of any bakery, hotel, boarding-house, restaurant, saloon, lunch-counter, or other place of public entertainment, or any person having charge thereof, or employed thereat, or any person furnishing board for others than members of his own family, or for any employes where such board is furnished as the compensation or as a part of the compensation of any such employe, shall place before any patron or employe, for use as food, any substance designed to be used as a substitute for butter and cheese, unless the same be accompanied by a copy of the statement described in section three of this Act, and by a verbal notification to said patron that such substance is a substitute for butter or cheese.

SEC. 8. No action can be maintained on account of any sale or other contract made in violation of, or with intent to violate, this Act by or through any person who was knowingly a party to such wrongful sale or other contract.

SEC. 9. Every person having possession or control of any substance designed to be used as a substitute for butter and cheese which is not marked as required by the provisions of this Act shall be presumed to have known, during the time of such possession or control, that the same was imitation butter, or imitation cheese, as the case may be.

SEC. 10. No person shall efface, erase, cancel, or remove any mark, statement, or label provided for by this Act, with intent to mislead, deceive, or to violate any of the provisions of this Act.

SEC. 11. No butter or cheese not made wholly from pure milk or

cream, salt, harmless coloring matter, shall be used in any of the charitable or penal institutions that receive assistance from the State.

SEC. 12. Whoever shall violate any of the provisions or sections of this Act shall be deemed guilty of a misdemeanor, and shall, upon conviction thereof, be punished for the first offense, by a fine of not less than fifty dollars, nor more than one hundred and fifty dollars; or by imprisonment in the county jail for not exceeding thirty days; and for each subsequent offense, by a fine of not less than one hundred and fifty dollars nor more than three hundred dollars, or by imprisonment in the county jail not less than thirty days, nor more than six months, or by both such fine and imprisonment, at the discretion of the court. One half of all the fines collected under the provisions of this Act shall be paid to the person or persons furnishing information upon which conviction is procured.

SEC. 13. Whoever shall have possession or control of any imitation butter or imitation cheese, or any substance designed to be used as substitute for butter or cheese, contrary to the provisions of this Act, shall be construed to have possession of property with intent to use it as a means of committing a public offense, within the meaning of chapter three, of title twelve, of part two, of an Act to establish a Penal Code; *provided*, that it shall be the duty of the officer who serves a bench warrant issued for imitation butter or imitation cheese, or any substance designed to be used as a substitute for butter or cheese, to deliver to the Agent of the Dairy Bureau, or to any person by such Dairy Bureau authorized in writing to receive the same, a perfect sample of each article seized by virtue of such warrant, for the purpose of having the same analyzed, and forthwith to return to the person from whom it was taken the remainder of each article seized as aforesaid. If any sample be found to be imitation butter or imitation cheese, or substance designed to be used as a substitute for butter or cheese, it shall be returned to and retained by the magistrate as and for the purpose contemplated by section fifteen hundred and thirty-six of an Act to establish a Penal Code; but if any sample be found not to be imitation butter or imitation cheese, or a substance designed to be used as a substitute for butter or cheese, it shall be returned forthwith to the person from whom it was taken.

SEC. 14. It shall be the duty of the District Attorney, upon the application of the Dairy Bureau, to attend to the prosecution, in the name of the State, of any suit brought for the violation of any of the provisions of this Act within his district.

SEC. 15. The Governor shall, on or before the first day of July, eighteen hundred and ninety-seven, appoint three resident citizens of this State, who shall have practical experience in the manufacture of dairy products, to constitute a State Dairy Bureau, and which shall suc-

ceed the one now in existence in every respect. Members of this Bureau shall hold office for the period of four years from and after the first day of July, eighteen hundred and ninety-seven, and until their successors are appointed and qualified; *provided*, that the first members appointed under the provisions of this Act shall at their first meeting so classify themselves by lot as that one shall go out of office at the expiration of two years, one at the expiration of three years, and the other at the expiration of four years. Any vacancy shall be filled by appointment by the Governor for the unexpired term. The members of said Bureau shall serve without compensation, and within twenty days after their appointment shall take the oath of office as required by the Constitution, and they shall thereupon meet and organize by electing a chairman and treasurer. Any one of them may be removed by the Governor for neglect or violation of duty. They shall make a report in detail to the Legislature not later than the first day of December next preceding the meetings thereof.

SEC. 16. It shall be the duty of the State Dairy Bureau to secure, as far as possible, the enforcement of this Act. The State Dairy Bureau shall have power to employ an agent at a salary of twelve hundred dollars a year, and such assistants or chemists as from time to time may be necessary therefor.

SEC. 17. There is hereby appropriated for the use of this State Dairy Bureau, out of any money in the State Treasury not otherwise appropriated, the sum of five thousand dollars for each fiscal year hereafter, and commencing with the forty-ninth fiscal year. All salaries, fees, costs and expenses of every kind incurred in the carrying out of the law shall be drawn from the sum so appropriated, and the State Controller shall draw his warrant on the State Treasurer in favor of the person entitled to the same.

SEC. 18. All Acts and parts of Acts inconsistent with this Act are hereby repealed.

SEC. 19. This Act shall take effect immediately.

"PROCESS" BUTTER LAW.

AN ACT TO PREVENT DECEPTION IN THE SALE OF PROCESS OR RENOVATED BUTTER.

[Became a law, under constitutional provision, without Governor's approval.
February 23, 1899. Stats. 1899, p. 25.]

*The people of the State of California, represented in Senate and Assembly,
do enact as follows:*

SECTION 1. No person or persons, firms or corporation, shall sell, or offer for sale, or have in his or their possession for sale, any butter manufactured by boiling, melting, deodorizing, or renovating, which is

the product of stale, rancid, or decomposed butter, or by any other process whereby stale, rancid, or decomposed butter is manufactured to resemble or appear like creamery or dairy butter, unless the same is plainly stenciled or branded upon each and every package, barrel, firkin, tub, pail, square, or roll, in letters not less than one half inch in length, "process butter," or "renovated butter," in such a manner as the purchaser will be advised of the real character of such "process" or "renovated" butter.

SEC. 2. Whoever shall violate any of the provisions or sections of this Act shall be deemed guilty of a misdemeanor.

SEC. 3. It shall be the duty of the District Attorney of each and every county of this State, upon application, to attend to the prosecution in the name of the State, of any action brought for the violation of any of the provisions of this Act within his district.

SEC. 4. The State Dairy Bureau, by its agent and assistant agents, is hereby authorized and directed to enforce all of the provisions of this Act. All fines and penalties for the violation of this Act shall be paid to the agent or assistant agents of the State Dairy Bureau, and by said Bureau paid to the State Treasurer.

SEC. 5. All Acts and parts of Acts inconsistent with the provisions of this Act are hereby repealed.

SEC. 6. This Act shall take effect on and after its passage.

CHEESE-GRADING LAW.

AN ACT DEFINING THE DIFFERENT GRADES OF CHEESE, AND FOR BRANDING THE SAME, MANUFACTURED IN THE STATE OF CALIFORNIA.

[Approved March 4, 1897. Stats. 1897, p. 69.]

The people of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. Every person or persons, firm or corporation, who shall, at any creamery, cheese factory, or private dairy, manufacture cheese in the State of California, shall, at the place of manufacture, brand distinctly and durably on the bandage of each and every cheese manufactured, and upon the package or box, when shipped, the grade of cheese manufactured, as follows: "California Full-Cream Cheese," "California Half-Skim Cheese," and "California Skim Cheese."

SEC. 2. All brands for branding the different grades of cheese shall be procured from the State Dairy Bureau, and said Bureau is hereby directed and authorized to issue to all persons, firms, or corporations, upon application therefor, uniform brands, consecutively numbered, of the different grades specified in section one of this Act. The State

Dairy Bureau shall keep a record of each and every brand issued, and the name and location of the manufacturer receiving the same. No manufacturer of cheese in the State of California, other than the one to whom such brand is issued, shall use the same, and in case of a change of location the party shall notify the Bureau of such change.

SEC. 3. The different grades of cheese are hereby defined as follows: Such cheese only as shall have been manufactured from pure milk, and from which no portion of the butter-fat has been removed by skimming or other process, and having not less than thirty per cent of butter-fat, shall be branded as "California Full-Cream Cheese"; and such cheese only as shall be made from pure milk, and having not less than fifteen per cent of butter-fat, shall be branded "California Half-Skim Cheese"; and such cheese only as shall be made from pure skim-milk shall be branded "California Skim Cheese"; *provided*, that nothing in this section shall be construed to apply to "Edam," "Brickstein," "Pineapple," "Limburger," Swiss or hand-made cheese, not made by the ordinary Cheddar process.

SEC. 4. No person or persons, firms or corporations, shall sell, or offer for sale, any cheese, manufactured in the State of California, not branded by an official brand and of the grade defined in section three of this Act.

SEC. 5. Whoever shall violate any of the provisions of this Act shall be deemed guilty of a misdemeanor, and shall, upon conviction thereof, be punished for the first offense by a fine of not less than twenty-five dollars (\$25) nor more than fifty dollars (\$50), or by imprisonment in the county jail for not exceeding twenty-five days; and for each subsequent offense by a fine of not less than fifty dollars (\$50) nor more than one hundred dollars (\$100), or by imprisonment in the county jail not less than fifty days nor more than one hundred days, or by both such fine and imprisonment, at the discretion of the court.

SEC. 6. All Acts or parts of Acts inconsistent with this Act are hereby repealed.

SEC. 7. This Act shall take effect sixty days after its passage.

STATE VETERINARIAN ACT

AN ACT TO PROTECT DOMESTIC LIVESTOCK FROM CONTAGIOUS AND INFECTIOUS DISEASES; TO PROVIDE FOR THE APPOINTMENT AND DUTIES OF OFFICIALS TO CARRY INTO EFFECT THE PROVISIONS OF THIS ACT, AND TO PROVIDE AN APPROPRIATION THEREFOR.

[Became a law under constitutional provision, without Governor's approval.
March 18, 1899. Stats. 1899, p. 129.]

*The people of the State of California, represented in Senate and Assembly,
do enact as follows:*

SECTION 1. The office of the State Veterinarian of the State of California is hereby created. It shall be the duty of the Governor, within sixty days from and after the passage of this Act, to appoint a skilled veterinary surgeon for the State of California to fill said office of State Veterinarian, who at the date of such appointment shall be a graduate in good standing of a recognized college of veterinary surgery, legally qualified to practice as such in this State, and shall hold his said office at the pleasure of the Governor. The salary of said veterinary surgeon shall on no account exceed the sum of two thousand dollars per year, and his necessary expenses incurred in the discharge of his duties hereinafter provided for, not exceeding five hundred dollars per annum. In making said appointment it shall be the duty of the Governor to disregard political affiliations, and be guided in his selection merely by the professional and moral qualifications of said veterinary for the performance of his duties.

SEC. 2. It shall be the duty of the State Veterinarian, provided for in the first section of this Act, to protect the health of all domestic animals of the State from all contagious and infectious diseases, so far as practicable; and for the purpose he is hereby authorized and empowered, by and with the approval of the Governor, to establish, maintain, and enforce such quarantine, sanitary, and other regulations as he may deem necessary as to stock passing over any quarantine line existing, or which may be established within the State, and all such stock so moving shall be inspected by him and he shall issue his certificate of State inspection, unless such stock shall have been, immediately prior to such moving, inspected by an officer or agent acting under the laws of the United States. Whenever it may be necessary to carry out and give effect to the provisions of this Act, the Governor is hereby authorized and empowered to appoint an Assistant State Veterinarian, whose tenure of office and salary shall be determined and fixed by the Governor.

SEC. 3. Upon information by him received of the existence of con-

tagious or infectious diseases of domestic animals within this State, the State Veterinarian shall proceed to thoroughly investigate the same, and he is hereby authorized, by and with the approval of the Governor, to establish such quarantine, sanitary, and police regulations as may be necessary to circumscribe and exterminate such disease or diseases, and prevent the extension thereof, and he is hereby authorized and empowered to enter upon any grounds or premises and inspect any livestock necessary to carry out the provisions of this Act.

SEC. 4. Upon the discovery of any case of such contagious or infectious disease, the State Veterinarian shall immediately inform the State Dairy Bureau and the Board of Supervisors of the county or counties in which said disease exists, or diseased animals are located, of the existence of such disease and of such facts and circumstances in connection therewith as will enable said Board of Supervisors to take prompt and proper action to prevent the spread of such disease and to eradicate the same.

SEC. 5. Upon the receipt of such report, it shall be the duty of said Dairy Bureau when more than one county is involved, and of the Board of Supervisors when only one county is involved, to proceed immediately to eradicate or suppress said disease, to prevent its spread or introduction among healthy animals, or the infection of pastures, roads, places, or sections theretofore free from said disease and uninfected.

SEC. 6. Should said Board of Supervisors refuse or neglect for the period of five days to take any or proper action to quarantine such cases of contagious and infectious diseases so reported to them, or to suppress or eradicate the same, or prevent the spread thereof, the State Veterinarian shall have the power, and it shall be his duty, to quarantine such county, or such portions thereof as may be necessary, and thereafter it shall be unlawful for the owners of the domestic animals quarantined, their agents or employés, to move any of such animals across the quarantine line established, or without the county or portion thereof quarantined, without first obtaining a permit from said State Veterinarian, who shall, before such permit is issued, inspect and, if necessary, cause such animals and vehicles of transportation to be disinfected according to the rules laid down by the United States Bureau of Animal Industry, Department of Agriculture, or until such quarantine has been raised or discontinued by said State Veterinarian.

SEC. 7. The State Veterinarian shall determine, from time to time, the quarantine and other regulations necessary to prevent the spread among domestic animals of any malignant, contagious, or infectious disease, found to exist among the livestock of this State, and shall to that end coöperate with, and, so far as possible, obtain the assent of the proper United States authorities to the establishment or changing of quarantine lines, which are, or may be hereafter established, and when

he shall have done so he shall notify the Governor thereof, who, if he approve, shall issue his proclamation proclaiming the boundary of such quarantine, and the orders, rules, and regulations prescribed for the maintenance and enforcement of such quarantine, and shall publish the same in such manner as he shall deem expedient.

SEC. 8. Any person failing to comply with the provisions of this Act shall be deemed guilty of a misdemeanor, and upon conviction be fined not less than one hundred nor more than five hundred dollars for each offense, and shall be liable for any damage and loss that may be sustained by any person or persons by reason of the failure of such owner or agent to comply with the provisions of this Act.

SEC. 9. For the purpose of carrying out the provisions of this Act, there shall be appropriated the sum of eight thousand dollars, not more than one thousand dollars payable out of the revenues for the current fiscal year, out of the general fund of this State.

SEC. 10. This Act shall be in force and effect from and after its passage.

LAW RELATING TO BABCOCK TESTING APPARATUS.

AN ACT TO ADD A NEW SECTION TO THE PENAL CODE, TO BE KNOWN AND NUMBERED AS SECTION 381*a*.

[Became a law under constitutional provision, without Governor's approval.
March 16, 1901. Stats. 1901, p. 324.]

*The people of the State of California, represented in Senate and Assembly,
do enact as follows:*

SECTION 1. A new section is hereby added to the Penal Code, to be known and numbered as section three hundred and eighty-one *a*, and to read as follows:

381*a*. Any person, or persons, whether as principals, agents, managers or otherwise, who buy or sell dairy products, or deal in milk, cream, or butter, and who buy or sell the same upon the basis of their richness or weight or the percentage of cream or butter-fat contained therein, who use any apparatus, test-bottle, or other appliance, or who use the "Babcock test," or machine of like character, for testing such dairy products, cream, or butter, which is not accurate and correct, or which gives wrong or false percentages, or which is calculated in any way to defraud or injure the person with whom he deals, is guilty of a misdemeanor, and upon conviction shall be fined not more than five hundred dollars (\$500) or imprisoned in the county jail not more than six months.

SEC. 2. This Act shall take effect immediately.

LAW RELATING TO "FULL WEIGHT" BUTTER PACKAGES.

AN ACT ENTITLED AN ACT TO PREVENT THE SALE OF SHORT-WEIGHT
ROLLS OF BUTTER.

[Approved March 11, 1893.]

*The people of the State of California, represented in Senate and Assembly,
do enact as follows:*

SECTION 1. Any person or persons, firm or corporation, who offers for sale roll butter not of full weight to each roll, shall be guilty of misdemeanor.

SEC. 2. This Act shall go into effect sixty days after its passage.

NATIONAL PURE FOOD BILL.

58TH CONGRESS, } 2d Session. }	H. R. 6295.	} Calendar No. 1165. } Report No. 1209.
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IN THE SENATE OF THE UNITED STATES.

January 21, 1904.—Read twice and referred to the Committee on
Manufactures.

March 5, 1904.—Reported by Mr. Heyburn, with an amendment.

NOTE.—H. R. 6295 was introduced in the House of Representatives by Mr. Hepburn, of Iowa, on December 8, 1903, and was referred to the Committee on Interstate and Foreign Commerce, and ordered to be printed. Reported on January 18, 1904, with amendments. Committed to the Committee of the whole House on the State of the Union and ordered to be printed, and passed the House of Representatives on January 19, 1904. On January 21, 1904, was read twice and referred to the Committee on Manufactures in the Senate, and on March 5, 1904, the following bill was substituted and reported by Mr. Heyburn, of Idaho, in the Senate. The provisions of this bill are almost like Senate (McCumber) Bill 198. The parts printed in italics show what was not incorporated in original Senate Bill 198, as amended and reported, and the parts in heavy type in parenthesis show what has been omitted from the original Senate Bill 198 as amended and reported.

AN ACT FOR PREVENTING THE ADULTERATION OR MISBRANDING OF FOODS
OR DRUGS, AND FOR REGULATING TRAFFIC THEREIN, AND FOR OTHER
PURPOSES.

*Be it enacted by the Senate and House of Representatives of the
United States of America in Congress assembled,*

That the introduction into any State or Territory (or) the District of
Columbia, or *insular possession* from any other State or Territory, (or)
the District of Columbia, or *insular possession*, or from any foreign
country, or shipment to any foreign country of any article of food or

drugs which is adulterated or misbranded within the meaning of this Act is hereby prohibited; and any person who shall ship or deliver for shipment from any State or Territory, (**or**) the District of Columbia, *or insular possession* to any other State or Territory, (**or**) the District of Columbia, *or insular possession*, or to a foreign country, or who shall receive in any State or Territory, (**or**) the District of Columbia, *or insular possession*, from any other State or Territory, (**or**) the District of Columbia, *or insular possession*, or foreign country, or who, having received, shall deliver in original unbroken packages for pay or otherwise, or offer to deliver to any other person any such article so adulterated or misbranded within the meaning of this Act, or any person who shall sell or offer for sale in the District of Columbia, (**or**) the Territories, *or insular possessions*, of the United States such adulterated or misbranded foods or drugs, or who shall export or offer to export the same to any foreign country, shall be guilty of a misdemeanor, and for such offense be fined not exceeding two hundred dollars for the first offense, and for each subsequent offense not exceeding three hundred dollars, or be imprisoned not exceeding one year, or both, in the discretion of the court.

SEC. 2. That the Chief of the Bureau of Chemistry in the Department of Agriculture shall make or cause to be made, under rules and regulations to be prescribed by the Secretary of Agriculture, examinations of specimens of foods and drugs offered for sale in original unbroken packages in the District of Columbia, in any Territory *or insular possession*, or in any State other than that in which they shall have been respectively manufactured or produced, or from any foreign country, or intended for shipment to any foreign country which may be collected from time to time in various parts of the country. If it shall appear from any such examination that any of the provisions of this Act have been violated, *the Secretary of Agriculture shall cause notice to be given to the parties concerned with opportunity to be heard under such rules and regulations as may be prescribed by the Secretary of Agriculture, and if after such hearing it is found that any of the provisions of this Act have been violated, then* the Secretary of Agriculture shall at once certify the facts to the proper United States district attorney, with a copy of the results of the analyses, *or examination*, duly authenticated by the analyst, *or officer making such examination*, under oath.

SEC. 3. That it shall be the duty of every district attorney to whom the Secretary of Agriculture shall report any violation of this Act, or to whom any person, acting either on his own behalf or as the officer or agent of any State or Territory, (**or of**) the District of Columbia, *or insular possession*, shall present satisfactory evidence of any such viola-

tion, to cause proceedings to be commenced and prosecuted without delay for the fines and penalties in such case provided.

DEFINITIONS.

SEC. 4. That the term "drug" as used in this Act, shall include all medicines and preparations recognized in the United States Pharmacopœia for internal and external use; also any substance intended to be used for the cure, mitigation, or prevention of disease. The term "food," as used herein, shall include all articles used for food, drink, confectionery, or condiment by man or domestic animals, whether simple, mixed, or compound.

ADULTERATIONS AND MISBRANDING.

SEC. 5. That for the purposes of this Act an article shall be deemed to be adulterated—

In case of drugs:

First. If when a drug is sold under or by a name recognized in the United States Pharmacopœia, it differs from the standard of strength, quality, or purity as determined by the test laid down in the United States Pharmacopœia official at the time of the investigation: Provided, That no drug shall be deemed to be adulterated under this provision if the standard of strength, quality or purity be plainly stated upon the bottle, box, or other container thereof, although such standard may differ from that determined by the test laid down in the United States Pharmacopœia.

Second. If its strength or purity fall below the professed standard under which it is sold.

That such drug shall be deemed to be misbranded:

First. If it be an imitation of or offered for sale under the name of another article.

Second. If the package containing it or its label shall bear any statement regarding the ingredients or the substances contained therein, which statement shall be false or misleading in any particular, or if the same is falsely branded as to the State or Territory or *place* in which it is manufactured or produced.

In the case of confectionery an article shall be deemed to be adulterated:

If it contain terra alba, barytes, talc, chrome yellow, or other mineral substances or poisonous colors or flavors, or other ingredients deleterious or detrimental to health.

In the case of food an article shall be deemed to be adulterated:

First. If any substance or substances has or have been mixed and packed with it so as to reduce or lower or injuriously affect its quality or

strength (so that such product, when offered for sale, shall deceive or tend to deceive the purchaser).

Second. If any substance or substances has or have been substituted wholly or in part for the article (so that the product, when sold or offered for sale, shall deceive or tend to deceive the purchaser).

Third. If any valuable constituent of the article has been wholly or in part abstracted (so that the product when sold or offered for sale, shall deceive or tend to deceive the purchaser).

Fourth. If it contain any added poisonous (*ingredient*) or other *ingredient* (or any *ingredient*) which may render such article injurious to the health of the person consuming it: Provided, That goods intended for export shall not be deemed misbranded or adulterated when prepared and packed in accordance with specifications of the foreign purchaser, provided no substance is used that is in conflict with the laws of the country to which the goods are to be shipped, when such country, having laws upon the subject, does not prohibit such process.

Fifth. If it consists in whole or in part of a filthy, decomposed, or putrid animal or vegetable substance, or any portion of an animal unfit for food, whether manufactured, or not, or if it is the product of a diseased animal, or one that has died otherwise than by slaughter.

An article of food shall be deemed to be misbranded:

First. If it be (*an imitation of or*) offered for sale under the distinctive name of another article: Provided, That the term "distinctive name" shall not be construed as applying to any article sold or offered for sale under a name that has come into general use to indicate the class or kind of the article if the name be accompanied on the same label or brand with a statement of the place where said article has been manufactured or produced.

Second. If it be mixed, colored, powdered, or stained in a manner whereby damage or inferiority is concealed, so that such product, when sold or offered for sale, shall deceive or tend to deceive the purchaser.

Third. If it be labeled or branded with intent so as to deceive or mislead the purchaser, or purport to be a foreign product when not so, or is an imitation, either in package or label, of another substance of a previously established name, or which has been trade-marked or patented.

Fourth. If the package containing it or its label shall bear any statement, design, or device regarding the ingredients or the substances contained therein, which statement, design, or device shall be false or misleading in any particular, or if the same is falsely branded as to the State, (or) Territory, or place in which it is manufactured or produced:

Provided, *however*, That an article of food which does not contain any added poisonous or deleterious ingredients shall not be deemed to be adulterated or misbranded in the following cases:

First. In the case of mixtures or compounds which may be now or from time to time hereafter known as articles of food, under their own distinctive names, and not included in definition first of misbranded articles of food in this section.

Second. In the case of articles labeled, branded, or tagged so as to plainly indicate that they are mixtures, compounds, combinations, imitations, or blends: Provided, That the same shall be labeled, branded, or tagged so as to show the character and constituents thereof: And provided further, That nothing in this Act shall be construed as requiring or compelling proprietors or manufacturers of proprietary foods which contain no unwholesome added ingredients to disclose their trade formulas, except in so far as the provisions of this Act may require to secure freedom from adulteration or imitation: Provided further, That no dealer shall be convicted under the provisions of this Act when he can establish a guaranty signed by the wholesaler, jobber, manufacturer, or other party from whom he purchases such articles to the effect that the same is not adulterated or misbranded within the meaning of this Act, designating it: And provided further, (always) That said guarantor or guarantors reside in the United States. Said guaranty, to afford protection, shall contain the name and address of the party or parties making the sale of such article to such dealer, and said party or parties shall be amenable to the prosecutions, fines, and other penalties which would attach, in due course, to the dealer under the provisions of this Act.

SEC. 6. That every person, company, or corporation who manufactures or produces and delivers for interstate or foreign shipment or transportation, or who receives from any State, Territory, or the District of Columbia, or insular possession or foreign country, other than the State, Territory, District of Columbia, or insular possession in which it is received, and any person, company, or corporation who sells or exposes for sale in any Territory, or the District of Columbia, or insular possession, any article of food or drug (who manufactures or produces for shipment and delivers for transportation within the District of Columbia or any Territory or who manufactures or produces for shipment or delivers for transportation from any State, Territory, or the District of Columbia to any other State, Territory, or the District of Columbia, or to any foreign country, any drug or article of food, and every person who exposes for sale or delivers to a purchaser in the District of Columbia or any Territory any drug or article of food manufactured or produced within said District of Columbia or any Territory, or who exposes for sale or delivers for shipment any drug or article of food received from a State, Territory, or the District of Columbia other than the State, Territory, or the District of Columbia in which he exposes for sale or delivers such drug or article of food, or from any foreign country, shall furnish, within business hours and upon tender and full payment of the selling price, a sample of such drug(s) or article(s) of food to any person duly

authorized by the Secretary of Agriculture to receive the same, and in any Territory, or (in) the District of Columbia, or *insular possession*, to any officer or agent of such Territory or District, respectively, charged with the inspection of food(s) or drugs in such jurisdiction, and who shall apply to such manufacturer, producer, (**or vender**) or person, (**delivering to a purchaser**) *company, or corporation selling or exposing for sale as aforesaid* such drug or article of food for such sample (**for such use**) in sufficient quantity for (**the**) *an* analysis of any such article or articles in his possession.

SEC. 7. That any manufacturer, producer, or dealer who refuses to comply, upon demand, with the requirements of section six of this Act shall be guilty of a misdemeanor, and upon conviction shall be fined not exceeding one hundred dollars or imprisonment not exceeding one hundred days, or both. And any person found guilty of manufacturing or offering for sale, or selling any adulterated, impure, or misbranded article of food or drug in violation of the provisions of this Act shall be adjudged to pay, in addition to the penalties hereinbefore provided for, all the necessary costs and expenses incurred in inspecting and analyzing such adulterated articles which said person may have been found guilty of manufacturing, selling, or offering for sale.

SEC. 8. That any article of food or drug that is adulterated or misbranded within the meaning of this Act, and is (**transported or**) being transported from one State to another for sale, or *having been transported, remains unloaded, unsold, or in original unbroken packages*, or if it be sold or offered for sale in the District of Columbia and the Territories of the United States, or if it be imported from a foreign country for sale, or if intended for export to a foreign country, shall be liable to be proceeded against in any district court of the United States within the district where the same is found and seized for confiscation by a process of libel for condemnation. And if such article is condemned as being adulterated or misbranded within the meaning of this Act the same shall be disposed of *by destruction or sale*, as the said court may direct, and the proceeds thereof, if sold, less the legal costs and charges, shall be paid into the Treasury of the United States, but such goods shall not be sold in any State contrary to the laws of that State: *Provided, however, That upon the payment of the costs of such libel proceedings and the execution and delivery of a good and sufficient bond to the effect that such articles shall not be sold or otherwise disposed of contrary to the provisions of this Act, or the laws of any State, Territory, or laws enacted for the District of Columbia, the court may by order direct that such articles be delivered to the owner thereof.* The proceedings of such libel cases shall conform, as near as may be, to proceedings in admiralty, except that either party may demand trial by jury of any issue of fact

joined in such case; and all such proceedings shall be at the suit of and in the name of the United States.

SEC. 9. That this Act shall not be construed to interfere with commerce wholly internal in any State, nor with the exercise of their police powers by the several States: Provided further, That nothing in this Act shall be construed to interfere with legislation now in force, enacted either by Congress for the District of Columbia or by the Territorial legislatures for the several Territories, regulating commerce in adulterated foods and drugs within the District of Columbia and the several Territories, except wherein such legislation conflicts with the provisions herein.

SEC. 10. *That the provisions of this Act shall not apply to common carriers, or their servants, agents, or employees.*

SEC. 11. (SEC. 10.) That this Act shall take effect and be in force from and after the first day of January, nineteen hundred and five.

Passed the House of Representatives January 19, 1904.

Attest:

A. McDOWELL, *Clerk.*

NOTE.—On April 28th Senator Heyburn of Idaho gave notice that on the 8th of December next, after the morning hour he would ask the Senate to take up for consideration the bill (H. R. 6295) for preventing the adulteration or misbranding of foods or drugs and for regulating traffic therein, and for other puposes; so that the foregoing bill, with the exception of the parts printed in black-faced type and in parentheses, will come up for consideration before the Senate on the first day of the next session.

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UNIVERSITY OF CALIFORNIA PUBLICATIONS.

REPORT OF WORK

OF THE

AGRICULTURAL EXPERIMENT STATION

OF THE

UNIVERSITY OF CALIFORNIA

FROM JUNE 30, 1901, TO JUNE 30, 1903.

BEING A PART OF THE REPORT OF THE REGENTS OF THE UNIVERSITY



SACRAMENTO:

W. W. SHANNON, : : : : : SUPERINTENDENT STATE PRINTING.

1903.

CONTENTS.

	PAGE
FINANCIAL STATEMENT FOR YEAR JUNE 30, 1901, TO JUNE 30, 1902.....	7
STAFF OF THE EXPERIMENT STATION.....	8
LETTER OF TRANSMITTAL; E. W. Hilgard	9
FARMERS' INSTITUTES; E. J. Wickson	19
EXAMINATION OF SOILS; R. H. Loughridge.....	23
NORTHEASTERN LAVA-BED REGION.....	23
Surprise Valley, Modoc County.....	23
Big or Round Valley, Modoc County	24
Fall River Valley; description by S. Cadwallader.....	24
COAST RANGE REGION	26
Hoopa Valley, Humboldt County.....	26
Round Valley, Mendocino County	26
Upper Lake Valley, Lake County	26
Osage, Contra Costa County	26
Alameda Creek alluvium.....	27
SACRAMENTO VALLEY REGION	29
Orland, Glenn County.....	29
SOUTHERN CALIFORNIA	29
Indio, Riverside County.....	29
Coachella, Riverside County	29
Delta of Santa Clara River, Oxnard, Ventura County.....	29
Linda Vista, San Diego County	29
Santa Ynez Valley, Santa Rosa Tract, Santa Barbara County.....	29
HUMUS OF OREGON SOILS; E. W. Hilgard	31
TABLES OF ANALYSES, MECHANICAL AND CHEMICAL.....	folder, 33
LIST OF SOILS RECEIVED FOR EXAMINATION	34
LIST OF MINERALS, ETC., RECEIVED FOR EXAMINATION.....	36
ALKALI AND ALKALI LANDS	37
LIST OF PUBLICATIONS ON ALKALI RECLAMATION.....	38
ANALYSES OF ALKALI SOILS; R. H. Loughridge.....	39
Remarks on distribution and reclamation	39
Distribution in a spot at Tulare.....	40
Chino Ten-Acre Tract.....	44
Indio; J. F. Abbott; A. Sarbaugh	45, 47
Coachella; G. Schoeffer	47
Hynes; G. Anderson.....	48
Lancaster; M. R. Lyle.....	49
Colorado Delta; D. B. Williams	50
Fowler; R. D. Vandeburg.....	50
Corona; H. L. Rollins.....	51
Exeter; B. F. Teague	51
Pasadena; Miss Mimi Martin	52
Fresno; J. G. Dawes	52
Bridge; P. J. Rice; S. B. Pollard.....	52

ALKALI AND ALKALI LANDS—CONTINUED.

PAGE.

ANALYSES; by G. W. Shaw	53
Yuma, Arizona; Indian School	53
Coachella Valley; W. D. Smith	54
Salton Basin; G. D. Abrams	54
Fresno; John S. Dore	55
Imperial; Dr. F. C. Jones	55
Barnes; Harry Cross	56
Reclamation, Sonoma County; A. J. Larsen	56
Suisun; A. J. Larsen	56

PRELIMINARY PLANS AND ESTIMATES FOR DRAINAGE OF FRESNO

DISTRICT; C. G. Elliott	57
Object of survey; extent and results; depth and frequency of drains	57-59
General plans; open and covered systems; estimate of cost; efficiency	59-63
BENEFITS OF DRAINAGE; E. W. Hilgard	64

ANALYSES OF WATERS; George E. Colby

Stream and lake	66, 68
Spring	67, 69
Common wells	72
Artesian wells	78, 79
Reservoirs and ditches	78, 80
Sanitary examinations	78, 81
Drain waters from Chino substation	folder, 82

FOODS, FEEDING-STUFFS, ETC.; G. W. Shaw

Ajonjoli, linseed, cottonseed, and bone meals	83
White oak acorns, birdsfoot clover	84
Breakfast foods: Imperial granum, Malta vita, Phospho-nonstarch, Ground gum gluten	85
Fertilizers; sugar beets	86
Olive-oil manufacture	88
Summary of bulletins issued:	89
California sugar industry, No. 149	89
Value of oak leaves for forage, No. 150	89

EXAMINATION OF FRUITS, ETC.; George E. Colby

Sugar prunes from several localities	90
Comparative solubility of aluminum and tin in lemon juice	90
Composition of commercial alkalies or lyes	91
Brine from pickled olives from Spain	92
Nature's Wonder fertilizer-insecticide	92
Grain damaged by water	93
Almond pastes for pastries, etc.	94
Miscellaneous analyses of fruits, wines, oils, etc.	96
Increase of soluble matter in bread by toasting; E. W. Hilgard	98
Investigation of seeds of <i>Polygala apopetala</i> ; E. W. Hilgard	100

ENTOMOLOGY

Review of the work of the year; C. W. Woodworth	102
Summary of bulletins issued:	104
Grasshoppers in California, No. 142	104
California Peach-Tree Borer, No. 143	108
The Peach-Worm, No. 144	109
Red Spider of Citrus Trees, No. 145	109
Arsenical Insecticides, No. 151	109
Fumigation Dosage, No. 152	109
Spraying with Distillates, No. 153	110
Sulfur Sprays for Red Spider, No. 154	110

	PAGE.
VITICULTURE; E. H. Twight	111
Report of work of the year	111
Specimens received for examination	112
Summary of bulletins issued:	
New Methods of Grafting and Budding Vines, No. 146	113
Resistant Vines and their Hybrids, No. 148	113
VETERINARY SCIENCE AND BACTERIOLOGY; A. R. Ward	114
Report of the work of the year	114
Hog cholera; Texas fever; Pathological examinations	114-116
Ropy or slimy milk; Treatment of verminous bronchitis	116, 117
Scours in calves; Poultry diseases; Future investigations	117, 118
ANIMAL INDUSTRIES; Leroy Anderson	119
Butter-fat tests on thoroughbred cows	119
Cheese-making; Instruction at creameries and cheese factories	119
Weedy flavors in butter	121
ECONOMIC BOTANY; H. M. Hall	127
Report of work of the year	127
Climbing vines for southern California and northern Mexico	128
Street and ornamental trees for California	128
Plants received for identification:	
June, 1901, to July, 1902; J. Burt Davy	130
July, 1902, to June, 1903; H. M. Hall	135
DISTRIBUTION OF SEEDS, PLANTS, CUTTINGS; E. J. Wickson	141
REPORTS ON SEEDS AND PLANTS INCLUDED IN UNIVERSITY DISTRI-	
BUTION; E. J. Wickson	142
TREES AND SHRUBS	142
Eucalypts, Acacias, Constantinople Acacia, Edwardsia, Chilean Soap-tree, Tagasaste, New Zealand Oil-tree, Arizona Ash, Islay, Jajoba, Araucarias	142-146
MISCELLANEOUS TREES AND SHRUBS	146
Bellota, Brazilian Pepper-tree, Cryptomeria Japonica, Mulberry, Tree-Tomato	146
GREEN-MANURE AND FORAGE PLANTS	147
Fenugreek, Hairy vetch	147
Other Vetches—Narbonne, Chickling, and Winter vetches	148
The Lupins—Large White, European Blue	148
Field Peas from Russia—Bitter vetch and Field pea	148
Winter Lentil; African stock melon	149
Grasses—Browse, Tall Fescue, common Ray grasses	150
Rape	150
CEREALS—Oats, Giant Winter Rye, Wheat, Millet	150
FRUITS—Strawberries, Gooseberries	151
VEGETABLES—Vegetable Marrow, Potatoes, Sweet Fennel	152
THE ECONOMIC GARDEN; A. V. Stubenrauch	153
Plot tests of Green-manure and Forage plants	154
METEOROLOGICAL OBSERVATIONS, BERKELEY; A. O. Leuschner	161
REPORTS ON THE CULTURE SUBSTATIONS; A. V. Stubenrauch	161
REVIEW OF THE WORK	161
THE FOOTHILL SUBSTATION	162
Climate, with table	162
Tests of green-manure, grains, and miscellaneous plants	164
The orchard—Apples, Pears, Quinces, Almonds, Apricots, Peaches, Nectarines, Plums and Prunes, Cherries, Figs, Olives, Walnuts, etc.	168
Fertilizing hay crops	171

REPORTS ON THE CULTURE SUBSTATIONS—CONTINUED.	PAGE.
THE SOUTHERN COAST RANGE SUBSTATION	174
Climate, with table.....	175
Gluten and macaroni wheats.....	177
Miscellaneous cultures.....	177
The orchard and vineyard	178
THE SAN JOAQUIN VALLEY SUBSTATION	179
Climate, with table.....	179
The orchard—Apples, Pears, Apricots, Nectarines, Peaches, Plums and Prunes	181
The vineyard.....	184
THE SOUTHERN CALIFORNIA SUBSTATION	186
Climate, with table.....	186
Test-plot cultures of green-manure and miscellaneous plants.....	188
The orchard and vineyard—Oranges, Apples, Pears, Peaches, Almonds, Apricots, Plums, Figs, Grapes	189-194
THE UNIVERSITY FORESTRY STATIONS	195
THE SANTA MONICA STATION	196
Review of the work	196
Distribution of trees	197
Climate, with table	198
THE CHICO STATION.....	200
Review of the work	200
SUMMARY OF BULLETINS ISSUED.....	201
Experiments with Deciduous Trees, No. 141.....	201
Report of work at Culture Substations, No. 147	201
DONATIONS TO THE STATION	202
NEWSPAPERS AND PERIODICALS RECEIVED IN THE STATION READ- ING ROOM	203

FINANCIAL STATEMENT, 1901-1902.

**The Agricultural Experiment Station of the University of California, in Account with
the United States Appropriation, 1901-1902.**

	Cr. 1901-1902.	Dr. 1901-1902.
1902. To receipts from the Treasurer of the United States as per appropriation for fiscal year ending June 30, 1902, as per Act of Congress approved March 2, 1887.....		\$15,000 00
June 30. By Salaries.....	\$6,989 92	
Labor.....	4,371 29	
Publications.....	418 34	
Postage and stationery.....	310 87	
Freight and express.....	104 51	
Heat, light, water, and power.....	135 58	
Chemical supplies.....	762 31	
Seeds, plants, and sundry supplies.....	618 61	
Feeding-stuffs.....	319 20	
Library.....	48 83	
Tools, implements, and machinery.....	55 91	
Furniture and fixtures.....	89 00	
Scientific apparatus.....	42 90	
Traveling expenses.....	644 73	
Contingent expenses.....	5 00	
Buildings and repairs.....	83 00	
Totals.....	\$15,000 00	\$15,000 00

We, the undersigned, duly appointed Committee on Finance and Audit of the Corporation, do hereby certify that we have examined the books and accounts of the Agricultural Experiment Station of the University of California for the fiscal year ended June 30, 1902; that we have found the same well kept and classified as above, and that the receipts for the year from the Treasurer of the United States are shown to have been \$15,000.00, and the corresponding disbursements \$15,000.00; for all of which proper vouchers are on file and have been by us examined and found correct.

And we further certify that the expenditures have been solely for the purposes set forth in the Act of Congress approved March 2, 1887.

A. W. FOSTER,

I. W. HELLMAN, SR.,

Committee on Finance and Audit.

I hereby certify that the foregoing statement is correct, as shown in the books of the Agricultural Experiment Station of the University.

JOHN J. HERR,

Auditor.

BENJAMIN IDE WHEELER, Ph.D., LL.D., *President of the University.*

EXPERIMENT STATION STAFF.

E. W. HILGARD, Ph.D., LL.D., *Director and Chemist.*
E. J. WICKSON, M.A., *Horticulturist, and Superintendent of Central Station Grounds.*
W. A. SETCHELL, Ph.D., *Botanist.*
ELWOOD MEAD, M.S., C.E., *Irrigation Engineer.*
R. H. LOUGHRIDGE, Ph.D., *Agricultural Geologist and Soil Physicist. (Soils and Alkali.)*
C. W. WOODWORTH, M.S., *Entomologist.*
M. E. JAFFA, M.S., *Assistant Chemist. (Foods, Fertilizers.)*
G. W. SHAW, M.A., Ph.D., *Assistant Chemist. (Sugars, Starches, Oils, etc.)*
GEORGE E. COLBY, M.S., *Assistant Chemist. (Fruits, Waters, Insecticides.)*
RALPH E. SMITH, B.S., *Plant Pathologist.*
A. R. WARD, B.S.A., D.V.M., *Veterinarian, Bacteriologist.*
E. H. TWIGHT, B.Sc., Diplôme E.A.M., *Viticulturist.*
E. W. MAJOR, B.Agr., *Dairy Husbandry.*
A. V. STUBENRAUCH, M.S., *Assistant Horticulturist and Superintendent of Substations.*
WARREN T. CLARKE, B.S., *Assistant Field Entomologist.*
H. J. QUAYLE, A.B., *Assistant Entomologist.*
H. M. HALL, M.S., *Assistant Botanist.*
GEORGE ROBERTS, M.S., *Assistant Chemist in Charge Fertilizer Control.*
C. A. TRIEBEL, Ph.G., *Student Assistant in Agricultural Laboratory.*
C. A. COLMORE, B.S., *Clerk to the Director.*
EMIL KELLNER, *Foreman of Central Station Grounds.*

JOHN TUOHY, <i>Patron,</i>	}	Tulare Substation, Tulare.
JULIUS FORRER, <i>Foreman,</i>		
R. C. RUST, <i>Patron,</i>	}	Foothill Substation, Jackson.
JOHN H. BARBER, <i>Foreman,</i>		
S. D. MERK, <i>Patron,</i>	}	Coast Range Substation, Paso Robles.
J. H. OOLEY, <i>Workman in charge,</i>		
S. N. ANDROUS, <i>Patron,</i>	}	Southern California Substation, { Pomona. Ontario.
J. W. MILLS, <i>Foreman,</i>		
V. C. RICHARDS, <i>Patron,</i>	}	Forestry Station, Chico.
T. L. BOHLENDER, <i>in charge,</i>		
ROY JONES, <i>Patron,</i>	}	Forestry Station, Santa Monica.
WM. SHUTT, <i>Foreman,</i>		

The Station publications (REPORTS AND BULLETINS), so long as available, will be sent to any citizen of the State on application.

LETTER OF TRANSMITTAL.

President Benjamin Ide Wheeler,

DEAR SIR: The brief report of work of the Experiment Station, herewith transmitted, inaugurates a change in the policy heretofore pursued in our method of publication, which I trust will meet your approval. Thus far the bulk of our work has been published in (mostly biennial) reports, ranging near 400 pages; while only such matter as seemed of more pressing importance was published at once in the form of bulletins. It is now proposed to reverse this policy, by publishing our results mainly in bulletin form so soon as completed, and to include in the biennial or annual reports merely such matter as is not suitable for circulation in bulletins because being of minor interest to the State at large, or too technical in its nature. The present report is accordingly carried, so far as possible, to the end of the current financial year, viz., June, 1903.

The advantage of this plan, which has been adopted by most of the Experiment Stations, is that it permits of more prompt publication of discussions and results of direct interest to the farming population, and in a form in which it is much more likely to be read than when included in a large volume arriving at once. Moreover, the effects of the uncertainty of legislative appropriations for printing, which in the past has frequently delayed the publication of our work beyond all reason and to the great injury of its appreciation by the public, will thus be reduced to a minimum, and in a measure will prevent the recurrence of such accumulation as has necessitated the special deficiency appropriation made at the last session of the Legislature.

Increase in Mailing List.—It may be objected that the single bulletins are much more apt to be lost or dilapidated by the rural readers than would the larger reports; but while this is true, it is thought that this disadvantage, which applies in the main to persons not strongly interested, is amply offset by the advantages above alluded to. Moreover, the unmistakable and encouraging increase of interest in our work manifested in the enormous increase of our correspondence (between 12,000 and 15,000 letters annually) and mailing list, and at the Farmers' Institutes, all show a steady decrease in the proportion of the lukewarm persons who are likely to let our publications go into the waste-basket or kindling-box. This improvement is clearly manifested in the fact that while a few years ago editions of six or seven thousand copies of our publications sufficed for the demand both within and outside of the State, at present ten thousand must be our regular edition for general distribution, and only special circulars or reprints are restricted to a smaller number of copies. The increased demand for our publications is also noticeable on the outside; persons resident in the Eastern States and even in Europe ask to have our publications sent them, for

the reason that they either intend to move to California, or are already the possessors of "ranches" or orchards in the State.

It is clearly apparent that with the active work now being carried on by the several divisions of the Station, the usual allotments for printing, mailing, postage, and stationery will have to be materially increased within the next and succeeding years. The work of the Station can be of little use to the State at large, and the best efforts of the staff can but lead to discouragement, if publication and correspondence are hampered by lack of funds. Much time is saved when letters of inquiry can be answered by mailing a printed bulletin or circular, and generally a larger scope of information is thus conveyed than through a letter; upon which moreover postage has to be paid, while printed Station matter goes free. It is therefore a matter of first importance that the provision for printing shall be ample.

Clerical Work.—With the increased volume and activity of experimental work, the administrative and clerical work has also increased proportionally, and clerical assistance in the office of the Director's clerk is a heavy and increasing financial burden. As a matter of fact, the time of the clerk is now so fully taken up with administrative work and expert letter-writing that almost all merely mechanical work must be done by others, usually students, who in this way eke out their means for prosecuting their studies at the University. The amount thus expended for clerical help during the past financial year is about \$1,725; but this can not supply the imperative need of more stenographic assistance, which must be provided for during the coming financial year.

It is more and more evident that the position of Director's clerk must be filled by an agricultural expert—a graduate of the College of Agriculture, who shall be able to answer letters of inquiry with no more than a general prompting by the Director; who otherwise would be overwhelmed with personal correspondence work. It is equally evident that a man qualified for this position can rarely be obtained, much less permanently held, with the present salary. Under present conditions, so soon as the incumbent becomes well qualified for his work he will leave for a better-paid position; after which the entire process of acquiring the proper qualifications will have to be gone over again with a new incumbent. Among the necessary qualifications a reading knowledge of German and French, for the utilization of foreign exchanges and works of reference, is imperative. The more dignified title of "secretary" might be added as an inducement to really competent men.

Legislative Appropriations.—Besides the increased demand for information and work, public interest in the Station has manifested itself strikingly by the numerous measures intended to expand that work, introduced at the last session of the Legislature, as the direct result of popular pressure in that direction. While several of these measures have failed to become laws, three will become effective by the first of July of the present year, viz.: the provision of \$5,000 for a poultry experiment station located at Petaluma; the Fertilizer Control law, carrying an appropriation of \$1,800 for the establishment of a proper laboratory for the purpose, and also providing for the needful current expenses of carrying the law into effect, by means of a license fee of \$50

and a tax of 25 cents per ton on sales of fertilizers, to be paid by manufacturers or dealers, as the case may be. An appropriation of \$3,000 was also made for viticultural work, as against \$10,000 originally asked for by the viticultural interests. Outside of the Station work, but greatly to its benefit so far as successful coöperation with the farming population is concerned, provision was made for the expenses of holding Farmers' Institutes, by an appropriation of \$12,000, or \$6,000 per annum for two years. Bills carrying \$70,000 for the establishment of dairy school farms at two points in the State passed the Legislature, but failed of approval by the Governor. A bill to provide for the appointment of a State Entomologist, and carrying an appropriation of \$15,000, failed of passage; as did also a bill providing for the study of the diseases of certain animal pests and for the discovery of a virus for their destruction. A bill providing for the appointment of a plant pathologist, with a special view to the study of the rust disease of asparagus, passed the Legislature, but failed to reach the Governor. The work, however, was provided for by a syndicate of asparagus-growers, which enabled the University to appoint for the current year Prof. R. E. Smith, of the Massachusetts Agricultural College, whose previous experience in this particular disease qualifies him specially for the purpose. Professor Smith has been at work since May 1st.

When it is considered that legislative approval was given to appropriations for different purposes directly connected with agricultural investigation and instruction to the extent of \$103,800, it is evident that there is no lack of appreciation of and active interest in these subjects; even though the financial condition of the State prevented Executive approval of more than a small proportion (\$21,800) of the total appropriations made. It is to be hoped that especially the more ample provision for entomological work will be allowed at the next session of the Legislature.

Increase of Working Space.—For several years past the inadequacy of the office room and laboratory accommodations has been a source of difficulty and complaint. The partitioning of small offices from the entomological and bacteriological laboratories for the accommodation of the viticulturist and irrigation department afforded temporary relief, but the space thus taken from these laboratories is now needed for the increased number of students, and the offices are at best too small for the needs of the several divisions. With the appointment of a plant pathologist, and a chemist in charge of the Fertilizer Control, the situation has become untenable, and hence an enlargement of the present building was sought by the Director. But for various reasons the Regents decided that it would be better not to erect any more temporary structures, and made an appropriation for the purpose of rendering the corrugated iron building now occupied by the archaeological collections (which it is intended to transfer elsewhere) to the uses of the Departments of Agriculture and Botany, both of which are now overcrowded. According to the plan adopted, the Departments of Horticulture, Entomology, Plant Pathology, and Viticulture would be removed from the old building, leaving in the latter the divisions of Agricultural Chemistry and Physics with their laboratories, the Dairy and Veterinary departments, and that of Irrigation, all with materially increased space and accommodations. A part of the experimental work in viti-

culture would necessarily be carried on, as heretofore, in the excellent cellars of the old building; and the work on olives will require the continued occupancy of the small building west of the main agricultural building.

It is fervently hoped that by the time these increased accommodations become inadequate (as they doubtless will in the course of ten years at most) the larger permanent building planned for the Department of Agriculture will, in part at least, become available.

The details of the work of the several divisions are set forth in the reports of their chiefs; but some general remarks on their progress and needs must find place here.

Organization of the Station Council.—With the increase of the staff and the expansion of its work, it has seemed desirable to assemble its members in general meetings from time to time for the discussion of both general policy and individual needs. The Station council, consisting of all its active workers, now holds stated meetings every second and fourth Monday of each month, and such special called meetings as the Director, as chairman, may deem desirable. The work can thus be better planned and unified, and the claims of each division upon the limited funds considered and adjudicated; while at the same time, each worker is regularly informed of what his fellows are doing. The frequent presence of the President of the University, and even of Regents, at these meetings has greatly increased their interest and usefulness in promoting a better understanding of the work by the governing powers.

The Chemical Divisions.—The chemico-technical work of the Station has now assumed such a wide scope that it seems necessary to circumscribe it in some directions in order to leave room for the proper functions of the Experiment Station. The urgent needs at the first settlement and organization of new industries working under new and unprecedented conditions rendered it at least expedient, if not imperative, that the Station should at first deviate somewhat from the usual practice in order to give aid to "infant industries" by analyses and sometimes lengthy investigations of matters which in older communities, situated within the well-known régime of the humid climates of the East and of Europe, would be considered as being within the proper scope of private work. But in very many such cases the analyses given by commercial chemists remained a sealed book to the practical man, because of lack of intelligent interpretation under new conditions. The Station therefore was, and is now, constantly called upon to act as umpire or expounder of the results of others, and the diversity of samples which are sent to us for "analysis" is legion, including not only all kinds of natural and artificial products even remotely related to agriculture or botany, but also ores, minerals, rocks, etc.; the idea apparently being that the Station is a general bureau of gratuitous information and commercial analysis. A large number of such requests is of course declined and the applicants referred to assayers or commercial chemists; yet in cases in which simple inspection can determine the nature of minerals we usually give the information, on the general ground that the Station and the University profit in the esteem of the people by our so doing, and also because we thus frequently obtain desirable information on the natural features of the localities concerned. For I consider it now, as always, most essential that we should have

very complete information regarding the natural features of every part of the State, and being unable to obtain such information by a systematic survey, as would be desirable, we try to gather as many data as possible piecemeal, if need be, and from the mosaic thus produced gradually compose a more or less complete picture of the regions we are unable to reach personally.

The absolute necessity for obtaining this kind of information in a State embracing so great a variety of climatic and soil conditions, many of which though locally known are regarded with surprise and frequently with incredulity by visitors and newcomers, can hardly be overestimated. It was forcibly expressed at the late visit of German agriculturists, to whom the writer in a brief lecture gave the main points of difference between the arid and humid régime. They remarked that they would have only half understood what they saw but for this general preliminary information. The comparative uniformity of climate in a longitudinal direction, and the several abrupt changes encountered in crossing the State from east to west, are matters of such vital interest to the immigrant that his weal or woe may in many cases be the direct consequences of his choice of location.

Hence our examinations of *soils and waters* form a very important part of the Station work, and we endeavor to systematize it as much as possible; as is exemplified by the descriptions, given by Professor Loughridge in the present as well as in previous reports, of certain well-defined regions, of which he describes the soils in accordance with our long-established methods. The demand for the examination of soils supposed to be faulty on account of the failure of crops or trees is a persistent and heavy one, occupying a large proportion of Professor Loughridge's time. In all such cases we require very full information regarding the conditions under which the failures have occurred, including an examination of the land to the depth of at least four or five feet. While there are cases in which an actual chemical deficiency in plant food is indicated (most commonly in phosphoric acid, sometimes in nitrogen or humus, very rarely in potash), yet in by far the majority of cases the trouble complained of arises from some physical defect of the land, such as shallowness from underlying hardpan, gravel, or bottom water which has risen and injured the lower roots. In most cases the inquiry is for a fertilizer which will render the soil productive; whereas, in accordance with our former conclusions, in but few cases would such fertilization be of any avail. An excess of *alkali salts* is of course in many cases a prolific source of difficulty, and very many samples of this kind are sent for examination. It is pleasant to note that the former disposition to hide and resent any intimation of the presence of alkali has now given way to earnest efforts to deal rationally with the trouble; and our continued investigations into the conditions under which certain cultures can be made successful in alkali lands are widely utilized. These results have mostly been elaborated at the Tulare substation, the importance of which continues unabated and will be enhanced by the more complete appliances for both irrigation and drainage now being perfected there.

Next to the soils, the *water supply* is of the most direct importance to the immigrant and settler, and we have for years devoted much work to its analysis, for the reason that in so many cases natural waters in arid regions are charged with mineral salts, the daily and long-continued use of which is sure to produce at least disordered digestion, if

nothing worse; and which if used for irrigation would bring about trouble from alkali, or aggravate such as already exists. While there can be no question as to the propriety of the Station's examinations of irrigation waters, the opportunity thus offered of having waters examined without cost has led to the attempted abuse of the privilege on the part of persons desiring the analysis of mineral waters for commercial purposes, and others who send in three or more waters for analysis, not uncommonly with a request for an "immediate report." To the former class we reply that they must apply for such work to commercial chemists; to the latter, that we can not afford to make an indefinite number of water analyses for one and the same person or interest, but that if they will designate among the waters sent, one or two of special practical interest, we will make such examination as will determine its fitness for the use desired. In many cases it becomes very difficult to draw the proper line; but it has become evident that while this line of work can not be abandoned, it needs to be curtailed as much as possible unless a special provision is made for it, so that a special chemist can be employed for the purpose. As it is, the proper chemical work of investigation is seriously handicapped, more than half the time of Professor Colby being given to this class of work. It would have been impossible to carry it as long as we have done, but for the devising of "short-cut" methods of work for the determination of the main points at issue, omitting what is not of direct practical consequence. In our seed distribution, we found that too many people will ask for things which they can get for nothing, without any serious interest therein; while the imposition of even a small fee at once put an end to such demands. It might be worth while to try this in connection with the excessive demand for water analyses. It is probable that not one in twenty of the samples sent us would ever have reached the hands of a commercial chemist; and while we do not wish to exclude from the benefit of the Station's advice any persons unable to pay the fees necessarily charged by the latter, we also desire to be relieved from working for the merely idly curious.

In addition to the regularly-continued investigation of the nature and composition especially of *citrus fruits* as varied by the use of different fertilizers, which are not yet ready to be reported upon, many miscellaneous materials have occupied the attention of Professors Colby and Shaw; the latter having during the past academic year acted in place of Professor Jaffa, absent on a year's leave, but to return in August next. It should be mentioned that a large proportion of Professor Jaffa's time has been spent in coöperative work on nutrition, with Professor W. O. Atwater, at Middletown, Conn., which work he will doubtless continue on his return, with, it is hoped, increased facilities.

Professor Shaw has been actively engaged in the study of the *beet-sugar industry* of this State, the first-fruits of which have been published in Bulletin No. 149, which is chiefly historical and statistical; another bulletin, now in preparation by him, will deal more specifically with the practical features and peculiarities of the industry in California. Professor Shaw's courses on the sugar industry have been well attended, and being general in character serve not only for students of the beet-sugar industry, but also for those preparing for activities in connection with sugar production in Hawaii and the Philippines. It is proposed that hereafter they shall include also the production of other sugars, notably

of glucose, and in connection with these the manufacture of starch and the other products derived from this manufacture. It has for years been my hope to have a chair of agricultural technology established, which should include not only the products above referred to, but also the fats and oils, tanning, textile fibers, etc., which can be dealt with only very briefly in the general course now given by myself. Dr. Shaw has announced such a course of agricultural technology for the coming session, and I have no doubt that it will be numerously attended. Coöperative work with several beet-sugar factories has also been inaugurated by Dr. Shaw.

Mr. G. Roberts, a graduate of the Agricultural College at Lexington, Ky., and for several years Assistant Chemist in fertilizer work at that Station, has been appointed to the position of Assistant Chemist in charge of *Fertilizer Control work*, in accordance with the law enacted by the Legislature at its last session. He will take charge on July 1st. It was thought of importance to select for this position a person already familiar with the routine of such work in other States, in order to avoid unnecessary friction which might arise in placing the work in inexperienced hands, however well qualified in the current work of fertilizer analyses.

Entomology.—Great and notably useful activity has prevailed in the entomological department, where Professor Woodworth and his assistants—advanced students trained by himself—have taken the field in the fight against noxious insects, with the active coöperation of farmers and especially of fruit-growers, which has taken the substantial form of having either the latter directly, or the counties chiefly concerned, taking upon themselves to defray the local expenses of operation; the University paying the salaries of the experts and their transportation back and forth. The latter item of expense has been materially reduced in amount by the enlightened liberality of the railroad authorities, who have very generally granted such concessions in fares as to enable our workers to go back and forth much more freely, and keep closer supervision of the field operations, than would otherwise have been possible. The results of this work have been given up to the latest dates in Bulletins 142 to 145, and 152 to 154. These seven bulletins, of which summaries are given below, have excited great interest both in and outside of the State (Mr. W. T. Clarke's work on the potato-worm and peach-worm having been commented on in European, Australian, and South African journals), and have been largely instrumental in bringing about the public sentiment favorable to a more liberal treatment of the College of Agriculture, which found expression in the action of the last Legislature, already detailed above. The work against the codling-moth, for which \$2,750 has been appropriated by the counties of Santa Cruz and Monterey, is now (June, 1903) being actively prosecuted by Professor Woodworth and his assistants, apparently with very gratifying results, which however can not be definitely announced until later in the season. Professor Colby's work on Insecticides, summarized in Bulletin No. 151, embracing also the work done by him in pursuance of the "Paris Green law," enacted at a previous session of the Legislature, has been of great value in this connection.

The interference of the field work with the regular courses of instruction in entomology will be materially relieved by the appointment of

Mr. H. J. Quayle, a graduate in entomology in the University of Illinois, to the position of Assistant in Entomology.

Viticulture.—The viticultural work, for which only a very small appropriation from the University funds was available for the past four years, has been prosecuted as actively as the means permitted by Mr. E. H. Twight, who in addition to several courses of instruction in viticultural lines, has made extended investigations, in the field, of diseases of the vine and of the adaptation of resistant stocks to various soils and grafts, and has published two bulletins (Nos. 146 and 148) on phylloxera-resistant vines and methods of grafting. A number of experimental plots for testing the adaptation of various resistants have been established in the important grape-growing regions of the State, and with the help of the increased allowance made by the Legislature, this work will be energetically prosecuted. It is also intended to begin extended work on a practical scale in the preparation of improved pure or "selected" yeasts, in coöperation with the California Wine Association, whose kindly and efficient interest in our work will, we hope, materially supplement the still inadequate provision now available.

Botany.—The reports of Messrs. J. B. Davy and H. M. Hall, on the numerous specimens of plants sent to them for identification and report upon their economic value or demerits, illustrate strikingly the wide demand for information of this kind. While the Departments of Botany and Agriculture have much reason to regret the departure of Mr. Davy for the new and extended sphere of action offered him in the Transvaal, for which his long and varied work here had specially qualified him, we have reason to congratulate ourselves upon the retention, for the present at least, of Mr. H. M. Hall, as his successor. The position of economic botanist is one of the most difficult to fill satisfactorily, as it involves not only wide experience and reading, but also the ability to read technical publications in numerous languages in the original. The tendency to premature specialization now so general among young men, necessarily renders a subject involving such a comprehensive scope of study a less favored one, at least until the compensation given in such positions shall be more nearly correlative with that offered in the technical positions for which such knowledge qualifies the possessor.

Animal Industries.—In the Department of Animal Industries, the absence of Professor Major in the East, mainly with the object of completing the herd of the department, prevents an elaborate report, which is reserved for a future publication. That of his able predecessor, Professor Anderson, outlines the essential features of the plans for the development of this department, which are now being realized as rapidly as means will permit. The failure of the measures intended to provide for a dairy farm, due in the main to conflicting local interests, is perhaps not to be so much regretted in view of the great need of having a University farm on which the other activities requiring field work—General Agriculture, Horticulture, and Viticulture—can also be successfully illustrated and experimented upon in a location not too remote from the University; conditions which neither of the propositions actually passed by the Legislature would have satisfied. It is earnestly to be hoped that, in the interval to elapse before another legislative session, some plan satisfying the wider requirements, independently of local influences and jealousies, may be agreed upon. Meanwhile the

best possible use should be made of the barn, herd, pasture, and dairy laboratory, without unnecessary expenditure upon fixtures which will become useless when the final location of the University farm is determined upon. The past session has shown that the large number of dairy students attending the first session was in part the result of an accumulated demand of a number of years; so that the space at present allotted to the dairy school will not hereafter be as inadequate as it then proved.

Veterinary Science and Bacteriology.—The duties of the Professor of Veterinary Science and Bacteriology having been materially increased by the Act establishing a poultry experiment station at Petaluma, with an appropriation of \$5,000 for the two coming financial years, the provision for an assistant to Dr. Ward to take charge of the bacteriological laboratory during his frequent absences in connection with the veterinary investigations, already pressing heretofore, has become indispensable; and as such an appointment has been authorized by the Regents, it will now be possible to place the bacteriological instruction, which heretofore has suffered from unavoidable interruptions and inadequacies, upon a more satisfactory basis. Inasmuch as many students intending to devote themselves to medicine elect to take the bacteriological course during their preparatory years at Berkeley, with a view to advancing their professional studies, this has become a matter of more than merely academic importance.

Poultry Station.—The committee of three appointed by the Governor to select and secure land for the poultry station, consisting of Professors Ward and Major, and Mr. G. J. Armstrong, of Petaluma, has selected a suitable site of five acres within a short distance of that city, conveniently accessible and otherwise well adapted to the purpose in view. The conditions under which the land is held are such that in case the station should from any cause be abandoned in the future, the tract can be repurchased by the former owner upon repayment of the purchase price to the city of Petaluma. A short preliminary report on this subject by Dr. Ward is given below; it is a matter of congratulation that the services and advice of so eminent an authority as Professor Moore, of Cornell University, have been secured during the summer vacation in connection with the establishment and work of this station.

Miscellaneous.—The reports of Professor Wickson on the results of the seed distribution work, and of Professor Stubenrauch on the work of the substations, speak for themselves. The former work of the substations has been summarized by Inspector Shinn in Bulletin No. 147, and it has clearly become wise to terminate the work at the Southern Coast Range substation near Paso Robles, for reasons given by him as well as by his successor. The concentration of work upon the two important stations at Tulare and Pomona, resp. Chino, seems the more desirable, as the coöperation with the Department of Irrigation in the University and with the Bureau of Irrigation in the Department of Agriculture at Washington, is especially important there and at this time. Hence we have gone to considerable expense in improving the arrangements for irrigation at both of these substations, so that systematic and continuous work, independently of unfavorable seasons which have thus far been fatal drawbacks, can be prosecuted.

Farmers' Institutes.—The report of Professor Wickson on Farmers' Institutes held during the past year shows that the interest in this work has continued to increase among the agricultural population, and that as our means for the purpose have heretofore been altogether inadequate, the appropriation of \$6,000 per annum granted by the Legislature at the last session has been most timely. There can be no doubt that the constantly growing demand upon the Station for information of all kinds, as well as the growth of the classes in the College of Agriculture, have been materially assisted by the Institutes, and that this branch of University Extension is one of the most fruitful and needful. But the work is strenuous and wearing, and it is to be greatly regretted that the overstrain imposed upon himself by the efficient Conductor of Institutes for northern California, Mr. D. T. Fowler, has resulted in a collapse of his strength, which at one time threatened serious consequences. We hope, however, that he will before long be able to resume the duties which he has discharged so acceptably and even over-zealously.

Publications.—In connection with the list of Station publications given below, it should be stated that almost the entire task of editing, providing the illustrations, and revising the proof sheets of these publications has devolved, in addition to his other duties, upon Professor Loughridge, who in consequence has given up practically his entire summer vacation to this trying work.

Respectfully submitted.

E. W. HILGARD.

BULLETINS, ETC., ISSUED SINCE THE REPORT OF 1901.

The following *Bulletins* have been issued for distribution since the report of 1901:

- No. 141. Experiments with Deciduous Fruits at and near the Southern Coast Range Substation; by C. H. Shinn. 48 pages.
- 142. Grasshoppers in California; by C. W. Woodworth. 36 pages.
- 143. The California Peach-Tree Borer; by C. W. Woodworth. 15 pages.
- 144. The Peach-Worm; by Warren T. Clarke. 44 pages.
- 145. The Red Spider of Citrus Trees; by C. W. Woodworth. 19 pages.
- 146. New Methods of Grafting and Budding Vines; by E. H. Twight. 13 pages.
- 147. Report of Work at the Culture Substations; by C. H. Shinn. 120 pages.
- 148. Resistant Vines and their Hybrids; by E. H. Twight. 13 pages.
- 149. The California Sugar Industry; by G. W. Shaw. 54 pages.
- 150. Value of Oak Leaves for Forage; by W. W. Mackie. 21 pages.
- 151. Arsenical Insecticides; by George E. Colby. 38 pages.
- 152. Fumigation Dosage; by C. W. Woodworth. 17 pages.
- 153. Spraying with Distillates; by W. H. Volck. 31 pages.
- 154. Sulfur Sprays for Red Spiders; by W. H. Volck. 11 pages.

The following *Circulars* have also been issued, for distribution only as called for by those specially interested in the subjects embraced in them:

- The New Fertilizer Control Law; by E. W. Hilgard.
- Texas Fever; by A. R. Ward. 7 pages.
- Blackleg; by A. R. Ward. 3 pages.
- Hog Cholera; by A. R. Ward. 6 pages.
- Anthrax; by A. R. Ward. 3 pages.
- Contagious Abortion; by A. R. Ward. 13 pages.
- Method of Physical and Chemical Soil Analysis; by E. W. Hilgard. 24 pages.
- Remedies for Insects; by C. W. Woodworth. 19 pages.
- Laboratory Method for Ordinary Chemical Examination of Waters for Irrigation and Domestic Purposes. 4 pages.

FARMERS' INSTITUTES.

By EDWARD J. WICKSON.

Farmers' Institute work in California, which has been carried on since 1892 by the University of California by appropriation from its general funds, as described in my last report,* has now been taken up by the State and direct appropriation made for its maintenance by the enactment of the following law:

CHAPTER CLXXXIV.—*An Act authorizing the Regents of the State University to hold Farmers' Institutes, making an appropriation therefor, and prescribing the duties of the Controller and Treasurer in relation thereto.*

[Approved March 18, 1903; Stats. 1903, p. 205.]

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. The Board of Regents of the University of California is hereby authorized to hold institutes for the instruction of citizens of this State in the various branches of agriculture. Such institutes shall be held at such times, and at such places, as said board may direct. The said board shall make such rules and regulations as it may deem proper for organizing and conducting such institutes, and may employ an agent or agents to perform such work in connection therewith as they deem best. The course of instruction at such institutes shall be so arranged as to present to those in attendance the results of the most recent investigations in theoretical and practical agriculture.

SEC. 2. The sum of twelve thousand dollars is hereby appropriated out of any money in the State Treasury not otherwise appropriated, for the use of the Regents of the University of California in discharging its duties, as prescribed in section one, during the two fiscal years following the passage of this Act. One half of said sum, viz.: six thousand dollars, shall be paid on the first day of July, nineteen hundred and three, and the remaining one half (six thousand dollars) shall be paid on the first day of July, nineteen hundred and four.

SEC. 3. The Controller is authorized and directed to draw his warrants for the above sums, payable to the order of the Treasurer of the University of California, and the Treasurer of the State is directed to pay the same.

SEC. 4. This Act shall be in effect from and after its passage.

This enactment is plainly due to the popular approval which Institute work has secured from the agriculturists themselves and from other public-spirited citizens who appreciate the importance, in State progress and development, of bringing the results of scientific investigation and improved practice directly to the attention of the people in stated assemblies convenient of access to them. In the discussion in the Legislature and in the comments by the press and by those prominent in industrial and educational circles, the phase of University Extension known as Farmers' Institutes was highly praised for directness and efficiency; and the measure providing for its improvement and extension passed the Senate and Assembly without opposition and received enthusiastic approval from the Governor of the State.

In my previous reports reference has been made to the exceptionally large amount of Institute work undertaken by the members of the staff of the College of Agriculture of the University of California, as com-

* Report of work of the Agricultural Experiment Station of the University of California for the years 1898-1901, page 17.

pared with similar effort in other States. It was shown that though our agricultural instructors and investigators cheerfully discharge this work and appreciate its benefits to them and to the institution, it was clearly to the advantage of University investigation and instruction that less of it should be required of them. This fact has been generally recognized by our agriculturists, and on this basis they strongly urged separate provision of funds by the State and the employment of a greater number of assistants for the Institute work. There was also contemplated in this generous act by the Legislature the extension of Institute work, so that all localities desiring it could be visited by the Institute speakers; also that other phases of University Extension work in agriculture could be entered upon. These phases, which are proving very popular and useful in some of the foremost States eastward of the Rocky Mountains, are the preparation of reading courses and correspondence courses along agricultural lines and, if possible, the provision of circulating libraries, including books treating of rural industries and domestic economy, which should be passed under proper regulations from one local club or other farmers' organization to another throughout the State.

In connection with these agencies for stimulating and more adequately satisfying the demand for opportunities for instruction among the farming classes, it is also hoped to proceed further in the organization of more systematic extension work in rural topics, by arrangement for stated visits by instructors and lecturers, with intervening study and preparation by those desiring their suggestions and assistance. All these desirable phases of University Extension in Agriculture are under consideration by those to whom the University intrusts this effort; and as the new appropriation by the State becomes available it is expected that substantial progress will be made with such new undertakings as may seem to be feasible and to answer an adequate popular demand.

During the two fiscal years ending June 30, 1902 and 1903, Farmers' Institutes have proceeded with the wide voluntary participation of the agricultural instructors of the University and by apportionment from the general funds of the University, as has been described. There has been, on the whole, increased interest and more satisfactory local preparation for the meetings. The essays and addresses prepared by residents of the localities visited have been of great pertinence and value, and their wide publication in the agricultural journals of the State has been inspiring and helpful in ministering to more satisfactory practice. It is a notable fact that a large part of the most useful current agricultural literature, on the side of practice at least, consists of the carefully prepared essays which our most successful farmers and fruit-growers are contributing to the proceedings of the Institutes held in their own neighborhoods in all parts of the State.

North of the Tehachapi Mountains, Institute work has proceeded under disadvantage during the last fiscal year, owing to the protracted illness of Mr. D. T. Fowler, the Conductor. Since October, 1902, Mr. Fowler has been unable to undertake active work, although he has shared in planning and arrangement so far as his strength allowed. Owing to his illness more work has been cheerfully undertaken by other members of the staff. The popular sympathy and solicitude manifested in Mr. Fowler's distress is a token of the esteem in which he is held by the farming interests generally.

In southern California, Institute work under the exceedingly satisfactory promotion of Prof. A. J. Cook, Institute Conductor for that part of the State, has been carried on in increased measure during the last two years, and has commanded increased popular approval. The organization of local Farmers' Clubs has focused interest and given opportunity for continuous effort for social and industrial advancement, while the annual Farmers' Club Institute, attended by delegations from local clubs and by the agricultural public generally, has proved to be a strong influence toward the enactment of several measures of wide value to the State. It is a significant fact that all the measures which, after due investigation, were urged upon the Legislature of 1903 by resolutions adopted at the Farmers' Club Institute at Santa Ana, December, 1902, have become laws.

The attendance at the Farmers' Institutes increases steadily from year to year. In southern California the number of meetings has been slightly larger than hitherto; while the number in the central and northern districts has been slightly less, owing to the serious illness of the Conductor. The requirements of work at the University made it impossible for volunteers from the staff to meet all the demands during the last year. With the provision now made by the State this cause of shortage will disappear. Still it is satisfactory to report that, during the two years covered by this report, 112 different centers of rural population have been reached, and that 142 Institutes have been held—an average of 71 per year. The estimate of individuals attending, on the basis of notes taken at the meetings by the Conductors, is placed at 20,000 annually.

The following is the list of places at which Institutes have been held from July 1, 1901, to June 30, 1903, the numerals indicating the number of Institutes at each place:

Alhambra.....	1	Healdsburg.....	2	Palermo.....	1
Anderson.....	2	Highland.....	1	Perris.....	1
Arroyo Grande.....	1	Hopland.....	1	Pescadero.....	1
Bakersfield.....	1	Imperial.....	1	Placerville.....	2
Buena Park.....	1	Indio.....	1	Piru.....	1
Carpinteria.....	2	Kelseyville.....	1	Pomona.....	1
Ceres.....	1	Kingsburg.....	1	Pope Valley.....	1
Chico.....	2	Lakeport.....	1	Poplar.....	1
Chula Vista.....	1	Lakeside.....	1	Porterville.....	1
Coachella.....	1	Lancaster.....	1	Potter Valley.....	1
Colton.....	1	Lemon Grove.....	1	Redlands.....	1
Corona.....	1	Lincoln.....	2	Reedley.....	2
Courtland.....	2	Lindsay.....	1	Rialto.....	1
Cupertino.....	1	Lodi.....	1	Ripon.....	2
Dos Palos.....	2	Loomis.....	2	Roseville.....	1
El Cajon.....	1	Lompoc.....	1	Rumsey.....	1
Elk Grove.....	1	Los Banos.....	2	San Bernardino.....	1
Escondido.....	1	Los Gatos.....	2	San Diego.....	1
Etiwanda.....	1	Malaga.....	2	San José.....	1
Fair Oaks.....	2	Modesto.....	1	Salinas.....	1
Fernando.....	1	Monterey.....	2	Santa Ana.....	2
Fillmore.....	1	Monrovia.....	1	Santa Maria.....	2
Florin.....	2	Napa.....	1	Santa Paula.....	1
Fresno.....	1	Newcastle.....	2	Scandinavian Colony.....	1
Fullerton.....	1	Newman.....	2	Sebastopol.....	1
Galt.....	1	Niles.....	1	Selma.....	1
Geyersville.....	1	Nordhoff.....	1	Soledad.....	1
Glendale.....	1	Ontario (Ex. Sta.).....	2	Sonoma.....	1
Glendora.....	1	Orosi.....	1	St. Helena.....	1
Goleta.....	2	Oroville.....	1	Stockton.....	1
Grass Valley.....	1	Oxnard.....	1	Sunnyvale.....	1
Hanford.....	2	Pacific Grove.....	2	Tehama.....	1

Temperance	1	Upper Lake	1	Westminster	1
Traver	2	Vacaville	1	West Park	2
Tulare	1	Ventura	1	Wheatland	2
Turlock	1	Villa Park	1	Winters	2
Tustin	1	Watsonville	1	Woodland	2
Two Rock	1				

Earnest coöperation has been undertaken with the United States Department of Agriculture, in the special work in connection with Institutes in the States and Territories, provided for at the last session of Congress, and satisfactory correspondence has been carried on with Mr. John Hamilton, who is the Farmers' Institute specialist of the Department. It is hoped that he may be able to participate in some of our Institutes during the coming fiscal year.

PHYSICAL, CHEMICAL, AND FIELD WORK.

EXAMINATION OF SOILS.

By R. H. LOUGHRIDGE.

NORTHEASTERN LAVA-BED REGION.

The lava-bed region of the State covers a large portion of the northeastern corner, or about 8,000 square miles, embracing the eastern part of Siskiyou and Shasta and most of Modoc and Lassen counties. The chief portions that are susceptible of cultivation are the valleys along Pit and Fall rivers, the borders of Surprise and Goose lakes, and a few valleys that occur in the southern part of the region. These valleys are so severely isolated because of their almost inaccessibility, due to the rough character of the country, that they are devoted chiefly to the raising of stock and of such crops as can find a home market. In 1898 a series of Farmers' Institutes was held in these counties and samples of the soils of some of the valleys were obtained by Mr. Fowler, the Conductor of the Institutes; other samples have also been received since then from other persons. Several of these soils have been analyzed to ascertain their richness in plant-food elements, and the results are given below.

Surprise Valley, Modoc County.—Surprise Valley lies in the extreme northeastern part of the State, and covers about 400 square miles. It has a length of about 60 miles north and south, and a width of from 6 to 15 miles. On the east a low range of mountains separates it from the State of Nevada; on the north a high range cuts it off from Warner Valley in Oregon; while Warner Mountain, trending north and south, and having an elevation of about 6,000 feet, lies between it and Goose Lake Valley on the west. The valley opens southeastward into Nevada. The elevation of the valley is said to be between 4,500 and 4,800 feet above the sea.

Three lakes occupy the central part of the valley—known as Upper, Middle, and Lower lakes, covering about 100 square miles, and having a strongly alkaline water. They are said to have no visible outlet.

Lava beds lie on all sides of the valley, and the soil is largely composed of disintegrated volcanic material.

The valley is destitute of timber, but the mountain cañons and ravines usually have a growth of pine and cedar.

It is said that the lands on the east of the chain of lakes are too highly charged with alkali for farming purposes; while on the north and west there are natural meadows formed from the deltas of the Warner Mountain streams, and growing grasses and clover.

Stock-raising is the chief industry. The soil of the better part of the valley is a dark loam, partly under cultivation in grain and hay for local consumption.

No. 2169. *Soil of Surprise Valley*; taken near Cedarville, on west side of Middle Lake, Modoc County, by D. T. Fowler. The analysis was made by H. C. Myers, Ph.D., Honorary Fellow in the College of Agriculture, and now chemist of the beet-sugar factory at Greeley, Colorado. (Analysis given on pages 25 and 26.)

Big or Round Valley.—Pit River rises in the region of the three lakes, and for the first 15 miles is described as flowing through "Devil's Garden," a region covered with large boulders and masses of black lava and volcanic rocks; then through a narrow and deep cañon, wild and rugged, known as "Devil's Cañon." It then passes through a few very small and unimportant valleys, and enters Big or Round Valley, lying partly in the southwestern part of Modoc County and partly in Lassen County.

Big Valley has an extent of about 30 miles in length and 18 miles in breadth on either side of Pit River. There are several small creeks which empty into the river and aid in watering the valley.

The valley is bordered by lava plateaus and covered with sagebrush; and though there is said to be a large area of agricultural land, the chief industry is stock-raising, and some hay and grain are produced for local use.

The soil in the valley is said to vary from red clays to dark gravelly loams. A chemical analysis has not been made of the samples secured, but in the accompanying table will be found the result of a mechanical analysis.

Fall River Valley.—From Big Valley in Lassen County, the Pit River continues its course until it enters Fall River Valley in Shasta County, the best and most populous of the valleys in this part of the State. It is bordered on all sides by the high lava-bed plateau, with its volcanic mountains and peaks, which extends northward into Oregon and south into Butte County. The following description of the valley has been kindly made for us by Mr. S. Cadwallader, of Fall River Mills:

Fall River Valley, as it is generally called, lies mainly in the northeastern corner of Shasta County, though its eastern extremity extends up Pit River a few miles into Lassen County. Its length from northwest to southeast is a trifle over 25 miles. Its average width is not less than 8 miles. It may be said to contain above 200 square miles of territory, or 128,000 acres of land, nearly all of which is capable of cheap irrigation as compared with most sections of California.

Fall and Pit rivers both flow through it, either of which furnishes water enough to inundate the entire valley. Yet with most of this broad expanse of land lying idle, and with immeasured millions of feet of pure, sparklingspring and mountain water pouring through and past it into the Sacramento River and thence to the Pacific Ocean, no practical use of this water has ever even been attempted until a year or two ago, and this single effort of one individual is still far from desirable consummation.

The face of the valley is undulating. The soil is varied, being a light, sandy loam in most parts; considerable adobe in others; and a few hundred acres of worthless lava rock surface elsewhere. It was essentially a grazing section of country when first settled, but the encroachment of farms and growth of herds have driven the stock, cattle, and stockmen mainly to the adjacent mountain ranges.

With a few exceptions the methods of farming have been primitive and inefficient. Profitable crops of grain could not be realized more than one season in several. Farmers were driven to fall back upon hay and grass land. The output of products has chiefly been horses, mules, cattle, a few hogs, and some butter and cheese.

Until recently Sisson, 60 miles west, and Redding, 83 miles southward, were the nearest and only accessible railroad stations. The local demand at these places was quite limited and the markets easily overstocked. But the opening of a branch railroad to McCloud, from 40 to 50 miles from here, the growth of its lumber interests giving employment to many hundreds of men, and the marvelous resurrection and growth of Shasta and Trinity counties mining and smelting investments, with Redding as the chief distributing point, have made a steady and growing demand for everything in the line of food supplies. Before that, grain could not be sold for cash at any price in this valley. Live stock was but little better at home, but could be driven south to market. Now all is changed for the better; live stock is in demand at high prices, and fruit, vegetables, eggs, poultry, and dairy products are promptly taken at good prices, cash on delivery.

If railroad and irrigation facilities were added to the unequalled water power of our rivers, and the great timber belts surrounding us, Fall River Mills would become a manufacturing center, equal to any in the State. Instead of crude timber and rough boards, we could then manufacture here and ship to the world finished products increased an hundred fold in value.

At the confluence of Pit and Fall rivers for more than an eighth of a mile a fall of from 20 to 60 feet can be obtained by digging a short headrace; and from 5 to 8 miles

downward Pit River is a continuous series of falls and rapids, every rod of which distance is a prospective mill-site.

The elevation of the valley above sea level is about 3,000 feet. The thermometer ranges from 16° Fahr. below zero to 108° Fahr. above, as the two extremes for the last eight years. Late spring frosts often kill fruit and cut down vegetables through the month of May; and in 1894, after the middle of June, destroyed them entirely. But apples, pears, plums, prunes, nectarines, gooseberries, blackberries, raspberries, strawberries, and currants are generally abundant and of excellent quality. Early autumn frosts often catch late-planted melons. Cabbages, turnips, carrots, parsnips, and squashes are not surpassed by any grown elsewhere in the State. The alkali lands are suitable for pears and plums, and Hungarian prunes grow plentifully and of enormous size. Peaches, apricots, and cherries rarely ripen.

In addition to the immense flow of water through Fall and Pit rivers, nature has provided a great storehouse or reservoir for water on the north side of the valley toward the head of Fall River, abutting on the mountain, and fed by innumerable living springs along its lava-rock border. This lake, or "swamp," as it is locally termed, is connected with upper Fall River by Tule River in a way to catch and retain any surplus of water in them due to extraordinary falls of rain and snow. Something over a year ago Mr. McArthur, owner of the lake and adjoining land, commenced a ditch to connect the lake with Pit River for the double purpose of furnishing water to irrigate the valley and of furnishing power for turbine, electric, or other waterwheels. This ditch is 40 feet wide at the bottom, and varies in depth from 6 to 16 feet. Over 2 miles of it is excavated. When completed it will be nearly 4 miles long, exclusive of laterals. Over 8,000 acres have already been reclaimed, and when finished, about 15,000 acres which were wholly unproductive, will be converted into valuable hay and pasturage land. When suitable dams, gates, and levees are built it is estimated that the chief portion of the valley can be thoroughly irrigated at all seasons of the year for all time.

The following analyses, both mechanical and chemical, have been made of a sample of the mesa soil bordering the valley:

No. 2181. *Gray mesa soil*, from Sec. 8, T. 37 N., R. 5 E., near Fall River Mills, Shasta County. The sample was obtained by Mr. D. T. Fowler, and represents some 15,000 acres. The analyses were made by E. H. Lea, now chemist of a beet-sugar factory in the Hawaiian Islands.

No. 2173. *Dark soil of Big or Round Valley*, Modoc County; taken near Adin by D. T. Fowler. Depth taken, 12 inches.

MECHANICAL ANALYSES OF SOILS OF FALL RIVER, BIG, AND SURPRISE VALLEYS.

			Shasta County, Fall River Valley. No. 2181.	Modoc County.	
				Big Valley. No. 2173.	Surprise Valley. No. 2169.
Coarse materials				9.00	
Fine earth				91.00	
				100.00	
<i>Analysis of Fine Earth.</i>					
Hydraulic Value. Velocity per Second.	Diameter of Grains.	Characteristics.			
64 mm	.50-.30 mm	Very coarse sand	4.00	2.20	.85
32 "	.30-.16 "	Coarse sand	5.25	12.19	13.25
16 "	.16-.12 "	Medium sand	6.00	14.03	9.79
8 "	.12-.072 "	Fine sand	8.00	9.78	12.32
4 "	.072-.047 "	Very coarse silt	5.90	11.21	12.47
2 "	.047-.036 "	Coarse silt	4.25	7.26	7.09
1 "	.036-.025 "	Medium silt	4.60	4.03	7.10
.5 "	.025-.016 "	Fine silt	2.60	2.05	3.19
.25 "	.016-? "	Finest silt	25.85	22.00	19.30
.0023 "	?	Colloidal clay	29.50	12.61	10.97
Totals			96.35	97.36	96.33

The land of Fall River Valley represented by the sample has much less sand, nearly the amount of silt, and more than double the clay shown in the Big Valley soil. It is more plastic when wetted and has a higher water capacity—64 as against 55.1 per cent.

CHEMICAL ANALYSES OF SOILS OF FALL RIVER AND SURPRISE VALLEYS.

	Shasta County, Fall River Valley. No. 2181.		Modoc County, Surprise Valley. No. 2169.	
Coarse materials > 0.5mm	2.6		19.00	
Fine earth	97.4		81.00	
	100.0		100.00	
<i>Analysis of Fine Earth.</i>				
Insoluble matter	40.84	62.41	56.26	68.57
Soluble silica	21.57		12.31	
Potash (K ₂ O)		.40		.41
Soda (Na ₂ O)		.57		.41
Lime (CaO)		1.34		3.65
Magnesia (MgO)		.67		2.55
Br. oxid of manganese (Mn ₃ O ₄)		.06		.12
Peroxid of iron (Fe ₂ O ₃)		12.80		7.35
Alumina (Al ₂ O ₃)		6.10		13.00
Phosphoric acid (P ₂ O ₅)		.06		.25
Sulfuric acid (SO ₃)		.01		tr.
Water and organic matter		15.25		3.99
Totals	99.67		100.30	
Humus	.45		1.56	
Humus ash	.29			
Available phosphoric acid (citric method)	.03		.10	
Hygroscopic moisture (absorbed at 15° C.)	11.60		7.77	

A peculiarity of the two soils is their high per cent of soluble silica, much of which in the Fall River soil must be free silicic acid, as the alumina, alkalis, and earths are not sufficient to combine with all of it either as clay or zeolites. The high content of water may be due to this source.

SOILS OF THE COAST RANGE REGION.

No. 2319. *Soil of Hoopa Valley, Humboldt County.* The soil was sent by Mr. Jager; taken to a depth of 8 inches. The analysis was made by J. S. Jones, a student in the agricultural laboratory.

Hoopa Valley, an Indian reservation, lies on Trinity River, about 8 miles above its junction with the Klamath. It is a very fertile valley, irregularly bordered by the sloping foothills, dotted here and there with groves of live oak, and watered by frequent mountain streams.—(Humboldt County Souvenir, by C. S. Milnes.)

No. 2433. *Round Valley soil,* taken by W. W. Mackie, one fourth mile south of Covelo, Mendocino County. The analysis was made by Robert B. Gray, a student in the agricultural laboratory. Round Valley is in part an Indian reservation, and lies in the northern part of the county. It embraces quite a large area, bordered on all sides by high hills and drained by Round Valley Creek, flowing southeastward into Eel River.

No. 2295. *Tule soil* from Upper Lake, Lake County. The sample was sent by C. M. Hammond. The analysis was made by A. E. Graham, a student in the agricultural laboratory.

No. 2301. *Red hill soil,* from Upper Lake, Lake County. The sample, taken to a depth of 12 inches, was sent by Mr. Hammond and analyzed by J. S. Jones, a student in the agricultural laboratory.

No. 2454. *Sandy loam soil* from Osage, Contra Costa County. This place is in San Ramon Valley, on the west side of Mount Diablo, and

about one mile north of the town of San Ramon. The sample, 12 inches deep, was obtained by Professor Shaw to ascertain the suitability of the land for sugar-beet culture. The analysis of the sample was made under his supervision by W. E. Basham, a student in the laboratory.

No. 1880. *Alluvial soil* of Alameda Creek, on the place of Hon. J. L. Beard, Centerville, Alameda County. The samples were taken respectively, from a sugar-beet field, from a virgin soil, and from one that had been under cultivation. Each sample was taken to a depth of 12 inches. The analyses were made by Prof. M. E. Jaffa.

The soil of Hoopa Valley, No. 2319, shows in its analysis a high content of potash, phosphoric acid, and humus. It should, however, have a higher percentage of lime for a soil so loamy, and especially in the presence of so much magnesia. The proper amount of lime under the circumstances ought to be about two per cent in order to offset the excess of magnesia.

The tule soil, No. 2295, of Lake County, is rich in vegetable matter, but not especially so in humus, even in the presence of so much lime which should act in humifying the decaying vegetable materials. The nitrogen of the soil is excellent. The soil is rich in potash and lime, and well supplied with phosphoric acid.

Complaint had been made regarding the productiveness of the red hill soil of this Upper Lake region, but this sample, No. 2301, sent as a representative of that land, does not show a deficiency in the mineral ingredients, except that the phosphoric acid is at its minimum for fertility. For a soil so highly ferruginous as this the phosphoric acid should be in much larger per cent for best results; and if the soil has sufficient depth for deep rooting of crops, and an ample supply of water, then fertilization with Thomas phosphate powder (basic slag) should be all that is needed.

The richness in the elements of plant food and the high fertility of the bottom lands of Alameda Creek are well shown in these analyses. The percentages of potash and phosphoric acid are very high, that of lime excellent, while of humus and organic nitrogen there is a large amount. If we assume that the virgin soil represents the original condition of the entire tract, we see the effects of cultivation in the falling off in percentages of humus, phosphoric acid, and nitrogen in those under cultivation, and especially in that of the beet field.

The analysis of the San Ramon Valley sample shows a soil fairly well supplied with the chief elements of plant food. While the phosphoric acid is rather low, yet in so loose a soil and in the presence of so much lime it will hardly need fertilization with phosphates for a number of years.

The Covelo soil, while rich in elements of plant food, is very sandy, containing as it does but little more than one per cent of alumina. A good depth and moisture supply would therefore be required for best productiveness, especially in orchard growths, and that it has this is indicated by the native growths of the valley.

ANALYSES OF SOILS OF THE COAST RANGE REGION.

	HUMBOLDT COUNTY.	LAKE COUNTY.		ALAMEDA COUNTY.		CONTRA COSTA COUNTY.	MENDOCINO COUNTY.
		Upper Lake.	Red Hill Soil. No. 2301.	Alameda Creek Bottom Land.	San Ramon Valley, Loam Soil. No. 2454.		
	Hoopa Valley Soil. No. 2319.	Tule Soil. No. 2295.		Beet-field Soil. No. 1880.	Cultivated Soil. No. 1881.	Virgin Soil. No. 1882.	Covelo. No. 2453.
Coarse materials >0.55mm	34.00	all	26.00	all	all	all	
	66.00		74.00				
Fine earth	100.00	100.00	100.00	100.00	100.00	100.00	
Chemical Analysis of Fine Earth.							
Insoluble matter	54.47	37.90	52.93	65.10			77.52
Soluble silica	62.40	18.07	16.46	10.00			2.22
Potash (K ₂ O)	.61	.84	.61	1.17			.53
Soda (Na ₂ O)	.12	.72	.39	1.10			.59
Lime (CaO)	.44	2.34	2.51	1.38			4.50
Magnesia (MgO)	1.76	.50	1.37	2.63			1.83
Br. oxid of manganese (Mn ₃ O ₄)	.08	.02	.12	.04			.04
Peroxid of iron (Fe ₂ O ₃)	9.65	4.72	16.54	7.70			6.35
Alumina (Al ₂ O ₃)	10.03	12.58	3.83	6.07			1.70
Phosphoric acid (P ₂ O ₅)	.30	.12	.08	.19	.23	.23	.07
Sulfuric acid (SO ₃)	.23	.05	.04	.23			.04
Carbonic acid (CO ₂)		2.47					
Water and organic matter	14.53	18.84	5.07	5.63			5.56
Totals	100.15	99.17	99.95	100.29			99.78
Humus	7.83	1.70	.81	1.19	1.47	1.56	2.08
Humus ash				.75	.70	1.02	
Humus nitrogen, per cent in humus	6.65		16.90	8.91	7.24	10.05	5.10
Humus nitrogen, per cent in soil	.52	.77	.14	.11	.11	.16	.26
Available phosphoric acid, citric method.	.04		.01	.04	.04	.05	
Hygroscopic moisture at 15° C.	9.04	14.28	6.42	4.00			2.59

SOIL OF SACRAMENTO VALLEY.

Nos. 2291 and 2292. *Gray silty soil and subsoil* from Orland, Glenn County. The samples were taken by Warren T. Clarke, of the U. S. Department of Irrigation Engineering, from Lot 23, Orland Orange Park No. 1. It represents some 400 acres, and was cultivated in grain in 1900. The soil is comparatively loose, with change of tint at 11 inches. The subsoil was taken from 11 to 36 inches depth. The vegetation is wild oats, foxtail, etc. The mechanical and chemical analyses of the subsoil were made by M. Vaygouny, and the chemical analysis of the soil by B. Bowron, students in the laboratory.

SOILS OF SOUTHERN CALIFORNIA.

No. 2273. *Delta soil* of the Santa Clara River, Oxnard, Ventura County.

No. 2470. *Soil* from Indio, Riverside County. Analysis made by Messrs. Jaffa and Colby.

No. 2471. *Soil* from Coachella, Riverside County. Analysis made by Messrs. Jaffa and Colby.

No. 1936. *Red sandy soil* from Linda Vista, San Diego County. The analysis was made by B. Bowron.

No. 2476. *Soil* of Santa Ynez Valley, Santa Rosa Tract, Rinconada Ranch, Santa Barbara County. Analysis by A. L. Cook.

No. 2239. *Soil* of Timoteo Cañon, Banning, Riverside County.

MECHANICAL ANALYSES OF SOILS AND SUBSOILS.

Hydraulic Value.	Diameter of Grains.	Description.	Glenn County, Orland, No. 2292.	Red Hill Soil, Upper Lake, No. 2301.	Riverside County, Banning, No. 2239.
64 mm.	.50 - .30 mm.	Very coarse sand	4.54	1.51	16.20
32 "	.30 - .16 "	Coarse sand	7.16	.56	25.70
16 "	.16 - .12 "	Medium sand	4.23	2.26	5.00
8 "	.12 - .072 "	Fine sand	7.63	1.06	9.20
4 "	.072 - .047 "	Very coarse silt	10.20	2.31	8.70
2 "	.047 - .036 "	Coarse silt	7.36	6.24	4.30
1 "	.036 - .025 "	Medium silt	5.90	8.61	3.60
0.5 "	.025 - .016 "	Fine silt	4.22	1.72	1.10
0.25 "	.016 - .0023 "	Very fine silt	28.33	56.21	15.40
? "	.0023 - ?	Colloidal clay	19.82	19.91	10.40
Totals			99.39	100.39	99.70

The Orland subsoil shows a high percentage of clay and fine silt; it is plastic when wetted with water, but is not of an adobe nature. The large amount of silt and sand reduces its adhesive nature and gives to it easy tillability. Percolation of water downward seems to be free.

The red hill soil of Upper Lake contains a very large percentage of clay and silt—more than 75 per cent. Much of this is, however, ferric hydrate.

The Banning soil is in mechanical composition the reverse of the above soils—it being quite sandy, and at the same time containing quite a percentage of very fine material. The two extremes are about 42 per cent of coarse sand and nearly 26 per cent of very fine clay and silt. The soil hence combines easy tillability and sufficient compactness and richness.

CHEMICAL ANALYSES OF CALIFORNIA SOILS AND SUBSOILS.

	GLENN COUNTY. Orland.		VENTURA COUNTY.	SAN DIEGO COUNTY.	RIVERSIDE COUNTY.		SANTA BARBARA COUNTY.
	Soil. No. 2291.	Subsoil. No. 2292.	Oxnard. Delta Soil. No. 2273.	Linda Vista. Mesa Soil. No. 1936.	Indio Soil. No. 2470.	Coachella Soil. No. 2471.	Santa Ynez Valley. No. 2476.
Coarse materials >0.55mm	30.9	25.0	23.5	29.5			99.0
Fine earth	69.1	75.0	76.5	70.5	all	all	1.0
	100.0	100.0	100.0	100.0			100.0
<i>Chemical Analysis of Fine Earth.</i>							
Insoluble matter	67.01	63.75	83.50	72.81	70.14	66.17	79.62
Soluble silica	10.23	11.95	1.12	9.76	8.43	11.37	3.32
Potash (K ₂ O)	.23	.69	.49	.18	.80	1.26	.63
Soda (Na ₂ O)	.19	.30	.15	.33	.25	.37	1.03
Lime (CaO)	1.53	.75	.35	.47	2.69	2.71	1.25
Magnesia (MgO)	.42	.95	.89	.58	.75	2.20	1.57
Br. oxid of manganese (Mn ₃ O ₄)		.15	.03	.32	.06	.05	.05
Peroxid of iron (Fe ₂ O ₃)	6.23	7.60	5.47	4.05	6.66	6.43	2.64
Alumina (Al ₂ O ₃)	8.38	6.14	2.93	5.20	6.96	5.53	6.24
Phosphoric acid (P ₂ O ₅)	.22	.36	.06	.11	.14	.21	.34
Sulfuric acid (SO ₃)	.12	.55	.07	.47	.06	.08	.21
Carbonic acid (CO ₂)	.28			.21	1.40	1.05	
Water and organic matter	4.94	6.71	5.12	4.85	1.90	2.55	3.38
Totals	99.84	99.90	100.18	99.34	100.24	99.98	100.28
Humus	.71	.62	1.60	.82	.40	.46	1.40
Humus ash	.30	.70		.19	.44	.42	.10
Humus nitrogen, per cent in humus	21.10	10.00	20.00	20.70			20.00
Humus nitrogen, per cent in soil	.16	.06	.32	.17			.28
Hygrosopic moisture	3.60	6.34			2.09	2.65	3.00

A glance at the analyses of the soil and subsoil from Orland shows quite a difference in composition. The percentage of potash is remarkably low in the soil, while in the subsoil it is about the normal for California soils. The phosphoric acid percentage is high in each sample, especially in the subsoil, which has about three times the normal for California soils. In the humus the peculiar richness and depth of California soils are illustrated, for here we find the soil rich in it and in organic nitrogen to 3 feet below the surface, and doubtless an examination of the third foot would have shown their presence in good amounts. The nitrogen is remarkably high for land situated in the upper end of the Sacramento Valley, where the rainfall is nearly 20 inches annually. This land then is rich in all of the elements of fertility with the exception of potash in the surface foot; and as the roots of trees derive their nourishment from below the surface soil the deficiency is of no material import. The large amount of sulfuric acid in each sample shows the presence of alkali sulfates such as are found more abundantly in the gooselands farther south.

The soil from Santa Barbara County also shows in its analysis a high content of alkalis, lime, magnesia, and phosphoric acid. The soda is evidently present in part as glauher salt. There are also high amounts of humus and nitrogen. Altogether this is an excellent soil, and if it has sufficient depth, moisture, and ventilation, it should be highly fertile.

The analysis of the soil of the Santa Clara River delta at Oxnard is disappointing, for its potash is only normal for fertility, its lime is low, and its phosphoric acid about at the minimum amount for best crop returns. It, however, is rich in humus and humus nitrogen, so that the low percentages of other ingredients will probably soon be felt in maturity of crops instead of in growth.

THE HUMUS OF OREGON SOILS.

By E. W. HILGARD.

It is well known that the States of Oregon and Washington are quite sharply divided by the Cascade range of mountains, into an eastern arid portion, where summer rains are of rare occurrence and of no agricultural significance, and a western belt, occupied by the Coast ranges and their intervening valleys, in which summer rains are abundant save in the months of August and September, when opportunity is afforded for the disastrous forest fires which sometimes shroud these States in smoke for weeks. Desiring to ascertain whether the marked differences in the humus and humus-nitrogen content observed as between California soils and those of the Eastern States (as shown in former publications of this Station) could be verified within the short distance—the width of the Cascade range—intervening between eastern and western Oregon, I caused the necessary determinations to be made on samples of soils secured at various times from the Willamette Valley and the Coast range region of Oregon. Unfortunately it was impossible at the time to obtain authentic corresponding samples from the eastern or arid side of the Cascades. But as the demonstration in respect to arid soils has

been so ample, it is worth while to put on record here the results of the humus determinations made on the humid side of the range. These determinations were made in 1898 by Mr. E. R. Lyman, an advanced student in the agricultural laboratory.

DETERMINATIONS OF HUMUS AND HUMUS-NITROGEN IN HUMID SOILS OF OREGON.

By E. R. Lyman.

No.		Per cent of Nitrogen in Soil.	Per cent of Humus in Soil.	Per cent of Nitrogen in Humus.
	From east side of Willamette River between Portland and Eugene City—			
302	Reddish soil from Marks Prairie, Clackamas Co.	0.148	2.49	5.96
331	Dark mellow loam from Marion County	0.162	3.61	4.50
300	Dark sandy loam from Marion County	0.157	3.51	4.47
300(a)	Light colored mellow soil from Jefferson, Marion County	0.118	2.51	4.68
315	Mellow loam from near Halsey, Linn County	0.179	2.88	6.22
3011	Dark loam from farm of W. C. Edwards, Junction City	0.291	3.93	7.41
312	Sandy loam from Eugene City, Lane County	0.179	3.16	5.67
		0.176	3.16	5.56
330	Heavy black clay soil from low lands, Com- stock, Douglas County	0.301	6.24	4.82
340	"Duff" or woodland soil, Lane County (full of rootlets and white particles of sand)	0.868	22.00	3.95

It appears from the above figures that the characteristics of humid soils as formerly defined, viz., high content of humus, and low nitrogen content of the latter, are fully sustained; the average deduced from our former work (5.0 per cent of nitrogen in the humus) being almost exactly reproduced.

The "duff" soil, No. 340, is interesting as representing the fully humified mold underlying the brownish surface-layer of decayed and decaying wood which characterizes the soils of the virgin forest in the Coast ranges of western Oregon, where daily rains are the rule, and where the constant protection of oilskin or rubber overcoats is a needful precaution when traversing the dripping underbrush. This soil is therefore formed under extreme humid conditions in a temperate climate, and may serve as a useful basis of comparison.

Number of Soil.....

214

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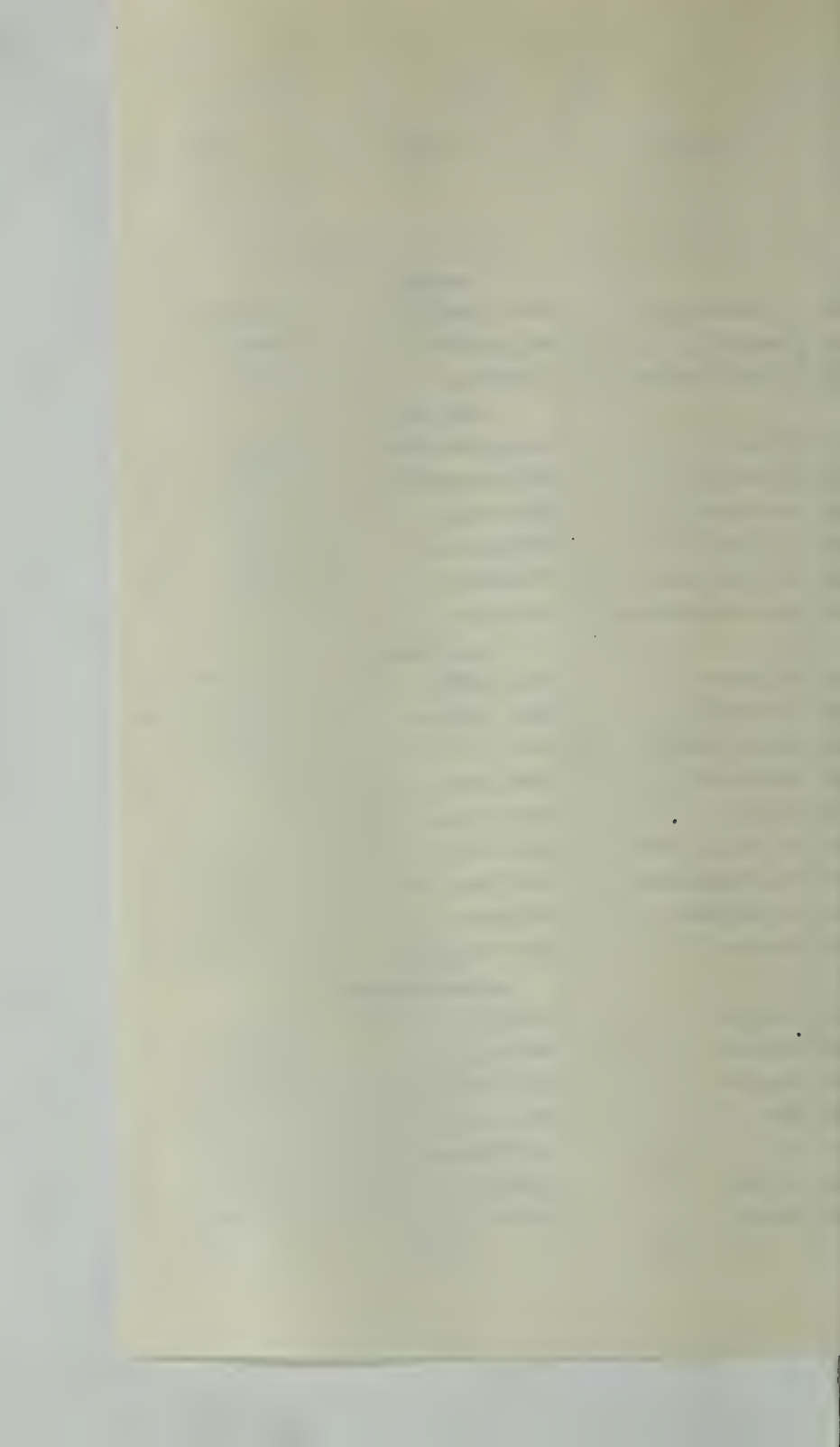
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FOLD OUT

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MECHANICAL COMPOSITION OF CALIFORNIA SOILS.

Number	NAME.	LOCALITY.	COUNTY.	Hygroscopic Moisture	Water Capacity by Volume	DIAMETER, IN MILLIMETERS; FINE EARTH.										Number	Analyst.	
						Sands.				Silts.								
						.50	.30	.16	.12	.072	.047	.036	.025	.016	?			
						Clay.												
2214	Volcanic ash soil	Placerville	El Dorado	11.80	55.6												2214	R. K. Bishop.
2309	Stickens	West of Wheatland	Yuba			.36	3.01	6.24	7.95	14.11	8.54	5.69	3.10	27.19	15.20		2309	R. H. Loughridge.
2143	Gooseland soil	Near Willows	Glenn			.10	.12	1.48	5.95	21.90	27.00	17.79	8.08	13.04	2.45		2143	L. M. Tolman.
2146	Gooseland underclay	Near Willows	Glenn		64.0	1.02	2.02	4.40	1.51	4.84	4.23	4.82	4.72	28.39	39.54		2146	L. M. Tolman.
2313	Underclay	Pearson Reclamation Tract	Sacramento				3.79	4.50	6.65	6.38	4.45	3.82	3.88	21.51	38.72		2313	R. H. Loughridge.
2311	Sandy plowsole hardpan.	Fresno	Fresno					.82		.15	.45	.70	.21	61.08	34.64		2311	R. H. Loughridge.
2169	Surprise Valley soil	Cedarville	Modoc	7.77		26.45	26.43	9.71	6.30	6.69	3.35	2.65	1.33	9.34	6.48		2169	R. H. Loughridge.
2173	Big Valley soil	Adin	Modoc		53.2	.85	13.25	9.79	12.32	11.21	7.26	4.03	2.05	22.00	10.97		2173	R. H. Loughridge.
2181	Mesa land	Fall River	Shasta	11.6	64.0	4.00	4.00	5.20	6.00	5.90	4.25	4.60	2.60	25.85	29.50	2181	E. H. Lea.	
2243	Valley soil	Potter Valley	Mendocino	10.41		4.00	4.00	4.20	3.85	10.00	10.00	11.30	7.20	10.60	28.40	2243	E. H. Lea.	
2080	Valley soil	Santa Maria Valley	San Luis Obispo		50.8	5.95	14.15	10.60	8.26	12.35	10.30	8.15	3.70	15.37	9.42	2080	R. H. Loughridge.	
2312	Hardpan	Exp. Sta., Paso Robles	San Luis Obispo			10.93	21.23	7.58	7.27	9.63	12.00	7.19	1.25	14.20	8.64	2312	R. H. Loughridge.	
1806	Clay plowsole hardpan	Riverside	Riverside			1.71	3.99	1.79	5.15	9.58	9.57	5.14	1.22	23.33	35.85	1806	R. H. Loughridge.	
2239	Subsoil, Timoteo Cañon	Ferris Valley	Riverside			3.47	5.75		6.38	9.12	11.20	6.39	4.75	28.66	18.03	2239	A. L. Emery.	
2472	Black adobe	Near Banning	Riverside		44.4	16.20	25.70	5.00	9.20	8.70	4.30	3.60	1.10	15.40	10.40	2472	W. W. Mackie.	
2430	Hillside adobe, 1st ft.	West Berkeley	Alameda	73.6		3.78	3.64	6.88	1.20	2.46	4.86	5.35	1.26	39.94	29.66	2430	R. H. Loughridge.	
2432	Hillside adobe, 3d ft.	Berkeley	Alameda	9.09	66.0	4.21	7.21	3.89	5.48	5.16	4.13	4.30	1.80	42.62	20.18	2432	R. H. Loughridge.	
	Hardpan	Berkeley	Alameda	63.6		.18	.28	2.11	3.18	2.83	2.75	2.82	4.10	51.02	30.45	2432	C. A. Triplett.	
2061	Clay soil	Paso Robles	San Luis Obispo			10.93	21.23	7.58	7.27	9.63	12.00	7.19	1.25	14.20	8.64		2061	R. H. Loughridge.
2324	Clay soil (typical)	Arroyo Grande Valley	San Luis Obispo	10.70	67.0		.94		.46	3.89	2.70	7.40	2.30	53.01	26.38	2324	F. R. Wertmuller.	
2325	Clay soil	Imperial	San Diego	5.75	74.4	.21	.34	1.48	1.45	1.68	1.73	1.31	.25	63.31	28.78	2325	F. J. Snow.	
2325	Silt soil	Imperial	San Diego	2.98	46.3		.49		5.19	26.08	23.50	13.32	.61	15.84	18.58	2325	R. H. Loughridge.	
2326	Silt soil (typical)	Imperial	San Diego				.27		1.63	13.64	27.58	20.52	9.61	13.16	9.74	2326	F. J. Snow.	
2326	Clay subsoil	Orland	Glenn	6.34	49.6	.13	.27	7.16	4.23	7.63	10.20	7.36	4.22	28.33	19.82	2326	R. H. Loughridge.	
2443	Round Valley soil	Covelo	Mendocino	2.59	45.6	8.13	11.11	7.35	8.69	10.71	8.03	5.98	4.58	23.09	10.95	2443	M. Vaygouny.	
2443	Dry bog soil	Lewis Creek	Tulare	64.8		5.78	3.06	2.74	4.67	6.25	6.74	7.44	6.97	26.43	33.84	2443	R. H. Loughridge.	
2284	Mesa soil.	Banning	Riverside	6.46	54.0	7.66	9.96	7.39	12.61	12.61	9.81	6.02	3.90	19.88	2284	R. H. Loughridge.		

SOILS RECEIVED FOR EXAMINATION.

The requests for soil examinations have during the past two years been more urgent than ever before, and about one thousand samples have been received from private parties throughout the State. Thirty-nine counties and one hundred and ninety-six localities are represented in the following list. Three fourths of the samples were sent to have ascertained whether or not the soil was lacking in any of the chemical elements of fertility, and if so, what fertilizers had best be applied. The other samples were for examination chiefly as to their alkali content.

Name.	Locality.	County.	Sender.
Soils (2)	Chico	Butte	Alex McHardy
Red soils (4)	Oroville	Butte	Rev. W. E. Vaughan
Red soils (10)	Palermo	Butte	A. Trost
Red soils (4)	Paradise	Butte	W. E. Mack
Red soil	Thermalito	Butte	A. B. Hunt
Soils (3)	Chico	Butte	Guill Bros.
Soil	Chico	Butte	C. L. Stillson
Alluvial loam (10)	Colusa	Colusa	Dr. R. A. Gray
Loams (63)	Colusa	Colusa	Henry Fick
Red sand	Oakley	Contra Costa	J. W. Bailey
Soils (4)	Concord	Contra Costa	R. A. Burgess
Soils (7)	Walnut Creek	Contra Costa	B. H. Bancroft
Dark loams (4)	Brentwood	Contra Costa	R. G. Dean
Soils (3)	Crescent City	Del Norte	Eugene G. Roy
Sandy soils (13)	Fresno	Fresno	C. Gaines
Sandy soils (5)	North of Fowler	Fresno	L. J. Mitchell
Sandy soils (12)	Fresno	Fresno	Jno. G. Dawes
Alkali soils (6)	Fresno	Fresno	O. V. Stout
Soils (5)	Reedley	Fresno	E. H. Twilight
Soils (10)	Fresno	Fresno	E. H. Twilight
Alkali soils (5)	Fresno	Fresno	P. J. Rice
Sandy soils (3)	Fowler	Fresno	R. D. Vandenburg
Alkali (3)	Selma	Fresno	M. B. Carrington
Hardpan	Kingsburg	Fresno	Mrs. Adaline Bearwald
Red soils (11)	Kings River	Fresno	John Thompson
Soils (6)	Bridge	Fresno	S. B. Pollard
Soil	Selma	Fresno	Mrs. A. M. E. Wright
Soils (4)	Clovis	Fresno	A. F. Norrish
Alkali soils (12)	Selma	Fresno	W. J. Whitney
Sandy soils (4)	Oleander	Fresno	W. H. Wells
Sandy soils (3)	Fresno	Fresno	Theo. Kearney
Sandy soils (6)	Fresno	Fresno	Wm. Forsyth
Sandy soils (4)	Fresno	Fresno	F. M. Chittenden
Sandy soils (8)	Oleander	Fresno	Lemon Home Colony
Sandy soils (2)	Fowler	Fresno	F. C. Lewis
Sandy soil	Fresno	Fresno	Mrs. H. E. Van Winkle
Alkali soils (7)	Fowler	Fresno	R. D. Vandenburg
Alkali soils (4)	Fresno	Fresno	J. G. Dawes
Sandy soils (2)	Fresno	Fresno	J. R. Hickman
Sandy soils (26)	Fresno	Fresno	A. Borland
Sandy soils (3)	Fresno	Fresno	A. W. Burdick
Sandy soils (7)	Fresno	Fresno	John Dore
Sandy soils (2)	Fresno	Fresno	Wm. Tardiff
Alkali soils (3)	Selma	Fresno	Miss G. Krick
Red soils (12)	Orland	Glenn	U. S. Irrig. Dept.
Red soils (5)	Orland	Glenn	H. T. Dobbins
Gray loam (3)	Orland	Glenn	W. H. Morrissey
Soils (4)	Briceland	Humboldt	A. F. Etter
Saline soil	Independence	Inyo	W. G. Dixon
Sandy soil	Bakersfield	Kern	D. H. Blood
Alkali soils (23)	Mojave	Kern	M. Lyle
Alkali soils (3)	Bakersfield	Kern	S. N. Scott
Sandy soils (4)	Kern	Kern	J. N. Thompson
Sandy soil	Bakersfield	Kern	J. S. Drury
Alkali soils (6)	Armona	Kings	Mrs. C. W. Sullivan
Soils (2)	Hanford	Kings	Dollenmayer
Tule soils (9)	Upper Lake	Lake	C. M. Hammond
Dark loam (6)	Kelseyville	Lake	E. W. Cook
Soils (8)	Pasadena	Los Angeles	Thomas Stone

Namè.	Locality.	County.	Sender.
Mesa soils (6)	Whittier	Los Angeles	Geo. H. Sargent
Sandy soils (3)	Los Angeles	Los Angeles	B. W. Johnson
Alkali soils (3)	Compton	Los Angeles	Nelson Ward
Soils (2)	Dundee	Los Angeles	M. K. Chandler
Sandy soil	Los Angeles	Los Angeles	W. G. Petchner
Saline soil	Los Angeles	Los Angeles	Morris Klein
Alkali soils (2)	Pasadena	Los Angeles	Miss Mimi Martin
Alkali soils (24)	Hynes	Los Angeles	G. A. Anderson
Volcanic ash soil	Los Angeles	Los Angeles	Fruit World Pub. Co.
Sandy soils (2)	Sierra Madre	Los Angeles	C. J. Pegler
Alkali soils (2)	Palo Verde Valley	Los Angeles	J. V. Hart
Red soil	Pasadena	Los Angeles	C. A. Washburn
Red sandy soils (2)	Alhambra	Los Angeles	E. F. Springer
Soils (15)	Pomona	Los Angeles	Oliver Young
Alkali soils (8)	Hynes	Los Angeles	Fred Norson
Loams (3)	San Dimas	Los Angeles	J. W. Anderson
Sandy soils (13)	Azusa	Los Angeles	W. H. Volck
Red soil	Sausalito	Marin	Miss E. B. Bruns
Soils (13)	Hermitage	Mendocino	Hermitage Tobacco Co.
Sandy soils (3)	Athlone	Merced	W. F. Dunning
Red soils (4)	Angwins	Napa	E. Angwin
Soils (4)	Napa	Napa	T. Forbes
Loams (4)	Tustin	Orange	E. E. Cook
Sandy loam	Loomis	Placer	Wm. E. Kleinsorge
Red soils (4)	Roseville	Placer	E. J. Shellhouse
Saline soils (5)	Coachella	Riverside	G. Schoeffer
Alkali soils (3)	Riverside	Riverside	J. O. Cutts
Alkali soils (3)	Coachella	Riverside	L. D. Schaffer
Sandy soil	Elsinore	Riverside	J. C. Ramsdale
Alkali soils (3)	Corona	Riverside	S. V. Sears
Alkali soils (3)	Corona	Riverside	H. L. Rollins
Alkali soils (4)	Indio	Riverside	A. Sarbaugh
Alkali soils (25)	Indio	Riverside	J. F. Abbott
Red soils (11)	Riverside	Riverside	F. M. Borden
Alkali soils (6)	Indio	Riverside	W. D. Smith
Red soils (2)	Riverside	Riverside	D. C. Twogood
Soil	Rio Vista	Sacramento	G. L. Crum
Sandy soils (3)	Oak Park	Sacramento	Wm. Curtis
Red soils (2)	Florin	Sacramento	L. M. Landsborough
Hardpan	Florin	Sacramento	Jas. Rutter
Red soil	Fair Oaks	Sacramento	S. B. Craig
Soils (3)	Fair Oaks	Sacramento	S. C. Mack
Soils (3)	Folsom	Sacramento	E. F. Gray
Tule soils (8)	Courtland	Sacramento	E. Gammon
Tule soils (8)	Courtland	Sacramento	Walter Gammon
Tule soils (6)	Grizzly Island	Sacramento	J. T. McArthur
Soils (4)	Hollister	San Benito	N. C. Briggs
Red soils (4)	Bryn Mawr	San Bernardino	E. M. Izard
Sandy soil	Colton	San Bernardino	J. W. Brink
Soils (12)	Pomona	San Bernardino	Oliver Youngs
Sandy soils (2)	Highland	San Bernardino	W. H. Ham
Soils (3)	Redlands	San Bernardino	C. M. Baxter
Soils (3)	Redlands	San Bernardino	W. D. Smith
Sandy soils (2)	Patton	San Bernardino	D. W. Devine
Desert soils (6)	Needles	San Bernardino	G. E. Morey
Soils (6)	Bloomington	San Bernardino	M. Baldrige
Sandy soils (2)	Santa Cruz Island	Santa Barbara	A. J. Caire
Soils (5)	Gilroy	Santa Clara	G. E. Vernon
Soils (4)	Palo Alto	Santa Clara	G. A. Coleman
Loams	Saratoga	Santa Clara	G. Babcock
Soils (12)	San José	Santa Clara	E. E. Geisel
Loams (5)	Los Gatos	Santa Clara	H. G. Osburn
Dark calc. soils (8)	San José	Santa Clara	H. D. McClure
Loams	Mountain View	Santa Clara	Mrs. M. Smith
Soil	San José	Santa Clara	D. F. Bateman
Reddish soils (5)	Saratoga	Santa Clara	H. C. Hogg
Dark loams (8)	San José	Santa Clara	S. H. Shelley
Dark clay soils (8)	Santa Clara	Santa Clara	Morse Seed Co.
Dark soils (3)	San José	Santa Clara	G. H. Start
Red soils (3)	Los Gatos	Santa Clara	Timothy Mee
Red soils (4)	Mountain View	Santa Clara	H. T. Fennel
Sandy loam	Glenwood	Santa Cruz	Miss Florence Kloss
Soils (6)	Watsonville	Santa Cruz	C. E. Cheeseborough
Dark sandy soils (3)	Watsonville	Santa Cruz	G. W. Sill

Name.	Locality.	County.	Sender.
Dark loam (4)	Aptos	Santa Cruz	E. C. McDonald
Alkali soils (4)	Barnes	San Diego	Harry Cross
Red soil	Escondido	San Diego	J. D. Payne, Jr.
Clay soils (3)	Del Mar	San Diego	Miss Alice B. Leonard
Alkali soils (3)	Imperial	San Diego	F. C. Jones
Soil	Imperial	San Diego	F. G. Havens
Alkali soils (6)	Imperial	San Diego	G. D. Abrams
Soils (2)	Lemon Grove	San Diego	Dr. E. L. Whiteley
Alkali soils (3)	Colorado Desert	San Diego	N. C. Skoegard
Alkali soil	Colorado River	San Diego	W. C. Pitchner
Loams (3)	San Diego	San Diego	J. F. Kelly
Alkali soils (10)	La Mesa	San Diego	Dewitt B. Williams
Alkali soil	Imperial	San Diego	A. P. Stover
Alkali soil	Imperial	San Diego	J. C. Hay
Red loam	Bostonia	San Diego	C. O. Nichols
Alkali soils	El Cajon	San Diego	R. S. Scott
Earths (2)	Pala	San Diego	M. M. Sickler
Alkali soil	Escondido	San Diego	C. A. Dickson
Alkali soils (4)	Chula Vista	San Diego	C. A. Whitmore
Soil	Lodi	San Joaquin	F. D. Ralls
Loam	Lodi	San Joaquin	A. D. Norton
Reddish soils (16)	Lodi	San Joaquin	M. P. Stein & Co.
Clay soils (4)	Pescadero	San Mateo	E. Weeks
Soils	San Luis Obispo	San Luis Obispo	M. D. Lowe
Soils	Creston	San Luis Obispo	M. D. Lowe
Red soil	Paso Robles	San Luis Obispo	L. G. Sinnard
Red soils	Olinda	Shasta	Samuel Hilton
Soils (16)	Redding	Shasta	C. F. Kimball
Saline soil	Suisun	Solano	A. J. Larson
Loams (2)	Vacaville	Solano	D. J. Parmele
Soils (2)	Cloverdale	Sonoma	F. Albertz
Sands (4)	Sebastopol	Sonoma	Pleasant Hill Or. Co.
Sandy soils (4)	Santa Rosa	Sonoma	B. W. Paxton
Sandy loams (4)	Forestville	Sonoma	Wm. Sehn
Soil	Cloverdale	Sonoma	D. A. M. Coomes
White earth	Santa Rosa	Sonoma	Andrew Hessel
Saline soils (8)	Reclamation	Sonoma	A. J. Larson
Red soils (2)	Live Oak	Sutter	J. M. Hampton
Loams (4)	Yuba City	Sutter	Miss M. S. Smith
Alkali soils	Turlock	Stanislaus	N. O. Hultberg
Sandy soils (36)	Turlock	Stanislaus	Hultberg & Soderberg
Sandy soils (10)	Turlock	Stanislaus	N. O. Hultberg
Sandy loams (9)	Salida	Stanislaus	R. L. Miller
Soil	Modesto	Stanislaus	J. L. Langworthy
Sandy soils (6)	Turlock	Stanislaus	A. J. Thorander
Sandy soils (2)	Ceres	Stanislaus	J. McNeill
Soils (4)	Corning	Tehama	W. E. Sanborn
Soils (3)	Red Bluff	Tehama	Fred Davis
Loams (12)	Corning	Tehama	Dr. A. L. Mahaffy
Alkali soils (2)	Exeter	Tulare	B. F. Teague
Saline soil	Tulare Lake bed	Tulare	W. J. Ball
Loams (2)	Visalia	Tulare	A. G. Wishon
Loams (3)	Exeter	Tulare	B. F. Teague
Soils (3)	Porterville	Tulare	W. B. Cartmill
Soils (2)	Visalia	Tulare	D. W. Horn
Soils (4)	Nordhoff	Ventura	E. S. Thacher
Sandy loams (2)	Davisville	Yolo	H. K. Carter
Yellow soils (5)	Dunnigan	Yolo	H. H. Dopkins
Soil	Grafton	Yolo	C. H. Fairchild
Soil	Marysville	Yuba	F. W. Stall
Red soils (6)	Marysville	Yuba	C. T. Aaron
Hardpan	Wheatland	Yuba	Ostrom
Soils (4)	Marysville	Yuba	Ehrman Olive Co.

SPECIMENS RECEIVED FOR EXAMINATION.

Name.	Locality.	County.	Sender.
Rocks (3)	Antioch	Contra Costa	D. Macartney
Gypsum	Bridge	Fresno	P. J. Rice
Gypseous infusorial earth	Mendota	Fresno	Paoli Gyps. Co.
Gypseous sand	Thermal	Fresno	C. F. Boekenooogen
Rocks (7)	Elk Creek	Glenn	A. W. Sehorne

Name.	Locality.	County.	Sender.
Minerals (2)	Bishop	Inyo	F. F. Connelly
Infusorial earth	Inyo	Inyo	
Zeolitic material	Bakersfield	Kern	J. S. Drury
Gypsum	Lassen County	Lassen	A. Flushhacker & Co.
Marl	Glendora	Los Angeles	Dr. A. E. Englehardt
Decomposed serpentine	Los Angeles	Los Angeles	N. O. Cooper
Iron ore	Los Angeles	Los Angeles	Frank Rimpan
Mica schist	Glendora	Los Angeles	J. E. Daly
Sandstone	Merced	Merced	Dr. A. F. Hyde
Sandstone	Monterey	Monterey	David Jacks
Ochreous clay	Napa	Napa	A. W. Thompson
Limestone	Santa Ana	Orange	Victor Montgomery
Gypsum	Santa Ana	Orange	C. W. Cole
Clay	Newcastle	Placer	P. H. Steude
Calc. clay stone	Riverside	Riverside	S. M. Bloom
Shell limestones (3)	Riverside	Riverside	S. M. Bloom
Limestones (2)	Corona	Riverside	T. A. Fraser
Marl (3)	Perris	Riverside	R. W. Teeple
Rocks (3)	Ethanac	Riverside	R. P. Small
Shell limestones	Hollister	San Benito	A. S. Murphy
Rock	San Juan	San Benito	G. W. Ray
Marls	San José	Santa Clara	M. H. Hyland
White marl	San José	Santa Clara	D. T. Fowler
Rocks (3)	San Diego	San Diego	J. F. Delgado
China clay	San Francisco	San Francisco	
Shell débris	San Francisco	San Francisco	J. W. Ferris
Earth for mineral paint	San Francisco	San Francisco	C. R. Look
Spring salt	Yreka	Siskiyou	J. J. Otay
Salt	Suisun	Solano	Wm. Pierce
Boiler scale	Rio Vista	Solano	J. H. Hyde
Gypsum (2)	Tulare	Tulare	
Residue from spring	Tulare	Tulare	J. Forrer
Marl			S. F. Earl

ALKALI AND ALKALI LANDS.

In view of the claims persistently put forth, sometimes directly but mostly by implication, in various official and other publications, to the effect that really nothing of any value had been done in the matter of the study and reclamation of alkali lands until some five or six years ago, it seems proper and necessary for the California station to put on record, expressly, the fact that the reclamation of alkali lands has been made a prominent subject of investigation from the very inception of its work in 1875; and the study of the same has been carried on as effectively as limited means would permit, from that time to the present, in the field, in the laboratory, and at two substations, as is evidenced by the space given to its discussion in every report, including the first made in 1877, and by the issuance of numerous bulletins specially devoted to alkali lands, from 1886 to the present time. Among these, the one entitled "Alkali Lands, Irrigation and Drainage in their Mutual Relations," first issued in 1886 and revised for reprint in 1892, summarizes the entire subject and clearly points out all the remedies that have since been put forth as new in various quarters. Of course the reclamation of saline seashore lands, based on substantially the same principles, has been practiced for centuries.

The following is a list of the publications treating of alkali lands that have been issued either by the Station, or elsewhere by the present Director:

PUBLICATIONS ON ALKALI LANDS AND THEIR RECLAMATION, BY THE CALIFORNIA EXPERIMENT STATION.

- Report of the College of Agriculture for 1877, pp. 43-49.
 Report of the College of Agriculture for 1879, pp. 30-39.
 Report of the College of Agriculture for 1880, pp. 12-16.
 Report on the Arid Regions of the Pacific Slope, made to the Commissioner of Agriculture in 1882, pp. 33-50.
 Report of the College of Agriculture for 1884, pp. 25-26.
 Irrigation, Drainage, and Alkali. Agr. Expt. Station, Univ. of Cal., Bulletin No. 53.
 Report of the College of Agriculture for 1886, pp. 27-29.
 Alkali Lands, Irrigation and Drainage in their Mutual Relations. Appendix No. 7 to Report of the Agr. Expt. Station, Univ. of Cal. 45 pp.
 Lakes of the San Joaquin Valley. Agr. Expt. Station Bulletin No. 82. 4 pp.
 Rise of the Alkali in the San Joaquin Valley. Agr. Expt. Station Bulletin No. 83. 4 pp.
 Alkali Lands, Irrigation and Drainage in their Mutual Relations. Appendix to Agr. Expt. Station Report for 1890, published in 1892. 69 pp.
 Alkali and Alkali Soils. Report of the Agr. Expt. Station for 1894-95. 32 pp.
 Growing of Sugar-Beets in Alkali Soils. Report of the Agr. Expt. Station for 1894-95. 20 pp.
 Distribution of Salts in Alkali Soils. Agr. Expt. Station Bulletin No. 108. 14 pp.
 Investigation on the Natural Vegetation of Alkali Lands. Agr. Expt. Station Report for 1895-97, pp. 53-75.
 Alkali Lands and Alkali Soils, by R. H. Loughbridge. Agr. Expt. Station Report for 1895-97, pp. 38-53.
 The Use of Saline and Alkali Waters in Irrigation. Agr. Expt. Station Report for 1897-98. 4 pp.
 Nature, Value, and Utilization of Alkali Lands. Agr. Expt. Station Bulletin No. 128. 46 pp.
 Tolerance of Alkali by Various Cultures, by R. H. Loughbridge. Agr. Expt. Station Bulletin No. 133. 43 pp.
 Lands of the Colorado Delta in the Salton Basin, by Frank J. Snow, E. W. Hilgard, and G. W. Shaw. Agr. Expt. Station Bulletin No. 140; 51 pp. With supplement, "The Native Vegetation and Crops of the Colorado Delta in the Salton Basin," by Joseph Burt Davy; 8 pp.

OTHER PUBLICATIONS ON ALKALI LANDS, BY E. W. HILGARD.

- Report on Cotton Culture in California. 10th Census, 1880, vol. V, pp. 721-731.
 Soils of Washington Territory, the Yakima Basin, the Colville Peninsula. Letter press and two colored maps, large folio, issued by the Northern Transcontinental Survey in 1883.
 On Some Redeeming Features of Alkali Soils. Proc. Am. Soc. for the Prom. of Agr. Sci. for 1885. 4 pp.
 On the Mutual Reactions of Carbonates, Sulfates, and Chlorids of the Alkaline Earths and Alkalies. Jointly with A. H. Weber. Proc. Soc. Prom. Agr. Sci., August, 1888.
 Further Investigations of the Mutual Relations of Carbonates, Sulfates, and Chlorids of the Alkaline Earths and the Alkalies. Jointly with M. E. Jaffa. Proc. Soc. Prom. Agr. Sci., 1892.
 A Report on the Relations of Soils to Climate. Bulletin No. 3 of the U. S. Weather Bureau, pp. 29-58. Govt. Printing Office, 1892.
 Ueber den Einfluss des Klimas auf die Bildung und Zusammensetzung des Bodens. (Revised translation of the preceding by the author.) Wollny's Forschungen, vol. 16, pp. 51-91; separate edition by Winter, Heidelberg, 1893.
 De l'influence du Climat sur la formation et la composition des sols. Revised by the author and translated by Jean Vilbouchévitch. Annales de la science agronomique française et étrangère, par Louis Grandeau; Paris, 1893; pp. 66-117.
 Considerations sur les Terrains Alkalins et Salants. Memoire lu devant la Société Nationale d'Agriculture de France, 29 Mars, 1893. Paris, 1893. 6 pp.
 Alkali; its Causes and Cure. Lecture at Compton Farmers' Institute. Rural Press and Kern County Land Company, 1893. 12 pp.
 La réclamation des terres salants pour la culture à la station de Tulare, Californie. Le Bas Rhône, 1894. 4 pp.
 Arid Lands and Reclamation of Alkali Soils. San Francisco Examiner, 1894.
 La Conquête des terrains alkalis par le plâtrage. Translated by J. Vilbouchévitch. Le Progrès Agricole et Viticole; Montpellier, June, 1894. Illustrated. 7 pp. 8vo.
 Die Zuckerrübenkultur auf Alkaliböden. Die Landwirtschaftlichen Versuchstationen. Berlin, 1895. 9 pp.
 Occurrence and Characteristics of Alkali Soils. Yearbook U. S. Department of Agriculture, 1895. 22 pp.
 Die Eroberung der Steppenländer für die Kultur. Die Nation, Berlin, No. 51, 1895. 4to. 2 pp.
 Fruchtbare Wüsteneien. Die Nation, Berlin, No. 46, 1895. 4to. 1 p.
 Steppes, Deserts, and Alkali Lands. Popular Science Monthly, March, 1896. 15 pp.

- The Geologic Efficacy of Alkali Carbonate Solutions. Amer. Jour. Science, August, 1896. 8 pp.
- Die Vertheilung der Salze in Alkaliböden unter verschiedenen Bedingungen. Wollny's Forch. Agr. Physik, 1896. 18 pp.
- Appendix to Circular No. 50, Office of Experiment Stations, U. S. Dept. of Agr., May, 1903. 2 pp.

ANALYSES OF ALKALI SOILS.

By R. H. LOUGHRIDGE.

The examination of alkali soils for the Station and for individuals continues to occupy much of the time of this laboratory. The investigations that are in progress at the Tulare and Chino substations, bearing on the problems of reclamation of alkali lands, and of the power of alkali tolerance on the part of many cultures, require the analysis of more than one hundred samples yearly, even of soils that have been already examined. This is made necessary not only because of the great differences in the amount of each of the several salts of alkali in soil columns within a few feet of each other, but because of the physical and chemical changes that are continually taking place in the soil column through capillary movements of moisture and alkali.

The former make necessary an examination of the soil column under each culture plot or large plant; while the other, or capillary movements of alkali, render the analysis of an alkali column of one year almost useless for the observations of the succeeding year.

Illustrations of the differences occurring within a few feet of each other are shown further on in a series of analyses of soils taken from alkali spots at the Tulare substation; while the capillary movements of alkali in soil columns are shown in the Station report for 1895.

In addition to the Station series of analyses there have been received for examination from private parties about 225 samples. The greater number of these came from Riverside, San Diego, Los Angeles, and Fresno counties, and the results are for the most part given in the following pages. In many of these the amount of salts found has not been sufficient to injure the land for most cultures; while on the contrary, some of the samples, especially from the desert regions of the State, have been found to contain enormous quantities of glauber and common salts. In one case the amount in a depth of 4 feet was found to be 838,000 pounds per acre, 725,000 of which was of common salt. Of course the remedy for lands thus highly charged with the salts of alkali is chiefly that of prolonged flooding, in order that the salts may be dissolved and carried down by percolation out of the reach of the feeding roots of the plants or trees. Should there be carbonate of soda present in the alkali, it would be best first to neutralize it with a good application of gypsum, which will not only change the carbonate into sulfate, but will precipitate the humus and cause it to remain in the soil; then, too, the tendency of the carbonate to form alkali hardpan in the subsoil will be obviated and percolation thus would not be interfered with. Should the lands lie in a position or locality where a drainage system could be established, then by percolation of the alkali-bearing water into these drains, the land could be entirely freed from the salts. Should drainage not be feasible, then the salts, after they are carried down to 6 or 8 feet more below the surface, should be kept

there by proper surface cultivation, which, if 3 to 5 inches deep, will largely prevent the subsequent rise of the alkali.

This plan for the reclamation of alkali lands has been urged by the Director of this Station upon farmers living in the alkali regions of the State, in the Station publications for the past twenty years; notably in the publication entitled "Alkali, Irrigation and Drainage in their Mutual Relations," first issued in 1888. It has been used at the Tulare substation since 1890, at the Chino substation since 1899; and at Oxnard, in Ventura County, it has resulted in the lowering of the water table and the removal of immense quantities of alkali salts from the sugar-beet lands of the Santa Clara River delta.

The rules, if formulated, would be, in brief:

First—The application of gypsum with irrigation, if black alkali or carbonate of soda be present, in order to insure the percolation of the water; apply in sufficient quantities to neutralize the carbonate and convert it into the sulfate.

Second—If possible, the establishment of a system of subdrainage with tiles at a depth of 4 to 7 feet, according to the character of the soil and the crops intended to be grown. It has been estimated by the irrigation engineer experts of the U. S. Department of Agriculture that such a system of tile drains in the neighborhood of Fresno would cost about \$13 per acre. This region covers about 28 square miles of vineyard land, and the only drainage outlet is 15 miles distant. (For full details, see chapter on Irrigation, page 57 of this Report.)

Third—The application of sufficient water by flooding to percolate down into the drains and thus carry with it the soluble alkali salts. It has been found that 20 inches of rainfall or of surface water will percolate to a depth of 5 feet in a loam and deeper in a sandy soil, but examinations should be made with a soil probe to see that the water does reach the drains. The addition of more water will then rapidly carry away the salts.

Fourth—Should drainage of the land not be feasible, then the leaching of the alkali down to a depth of 6 feet with water should be followed by care that the surface soil be kept loose to a depth of at least 3 inches, in order to prevent the subsequent rise of the water and the consequent return of the alkali to the surface. However, from experiments made, it is believed that the capillary rise of water and alkali will not be exerted to a greater height than 4 feet above the water line; this would leave a couple of feet of soil at the surface practically free from alkali.

The *examination of an alkali soil* would usually require a long time, because of the difficulty of extracting all of the soluble salts; but a short method for this has been in use for several years and facilitates the work very materially, and where formerly a week or more was required to extract a soil, now twenty-four hours are sufficient. The method is simply that of digesting 100 grams of the soil in 200 cc. of water, with frequent thorough shaking for twenty-four hours, allowing the soil to settle, pouring on a filter, and taking an aliquot portion of the filtrate for evaporation to dryness, and analysis.

Distribution of Alkali.—The San Joaquin substation is bordered on all sides by tracts of strong alkali, and prongs or tongues from these occasionally reach into the substation grounds. One of the latter occurs near the northeastern corner of the substation and has been treated with

DISTRIBUTION OF ALKALI SALTS IN A SPOT IN NORTHEASTERN CORNER OF TULARE SUBSTATION.

PERCENTAGE COMPOSITION.

DISTRIBUTION OF ALKALI SALTS.

41

	32 FEET WEST.				16 FEET WEST.				CENTER OF TONGUE.				16 FEET EAST.				32 FEET EAST.			
	Sulfates..	Carbonate	Chlorid ..	Total	Sulfates..	Carbonate	Chlorid ..	Total	Sulfates..	Carbonate	Chlorid ..	Total	Sulfates..	Carbonate	Chlorid ..	Total	Sulfates..	Carbonate	Chlorid ..	Total
FIRST LINE—																				
First foot.....	.785	.007	.140	.882	1.017	.012	.171	1.200	1.090	.009	.099	1.198	.914	.010	.099	1.023	.658	.014	.144	.816
Second foot.....	.051	.032	.009	.092	.363	.012	.027	.402	.225	.022	.009	.256	.060	.010	.009	.079	.154	.022	.018	.194
Third foot.....	.028	.014	-----	.042	.045	.007	.009	.061	.136	.005	.005	.146	.064	.006	.009	.079	.046	.006	.090	.142
Fourth foot.....	.023	.005	-----	.028	.045	.004	-----	.049	.077	.005	-----	.082	.023	.003	.004	.030	.039	.006	.005	.050
Averages.....	.209	.014	.038	.261	.370	.009	.052	.431	.382	.010	.028	.420	.265	.007	.030	.302	.224	.012	.064	.300
SECOND LINE—																				
First foot.....	.515	.012	.090	.620	.638	.010	.054	.702	1.512	.015	.036	1.563	.898	.010	.083	.991	.655	.010	.081	.746
Second foot.....	.127	.024	.009	.160	.078	.022	-----	.100	.063	.032	.005	.100	.136	.015	.009	.160	.128	.026	.009	.163
Third foot.....	.084	.013	.009	.106	.034	.012	-----	.046	.053	.007	-----	.060	.051	.024	.040	.109	.002	.009	.120	.133
Fourth foot.....	.107	.003	.009	.119	.034	.002	-----	.036	.055	.004	-----	.059	.035	.005	.040	.061	.005	.004	.070	.136
Averages.....	.209	.013	.029	.251	.196	.012	.013	.221	.421	.015	.010	.446	.271	.013	.023	.307	.238	.011	.026	.275
THIRD LINE—																				
First foot.....	.668	.014	.198	.880	1.342	.019	.360	1.721	.894	.012	.036	.942	1.001	.015	.386	1.402	1.206	.017	.063	1.286
Second foot.....	.065	.014	.018	.097	.212	.014	.054	.280	.147	.012	.009	.168	.314	.015	.126	.455	.354	.017	.009	.380
Third foot.....	.097	.003	.009	.109	.193	.005	.005	.203	.070	.005	.009	.084	.135	.017	.027	.179	.218	.011	-----	.239
Fourth foot.....	.058	.002	-----	.060	.107	.005	-----	.112	.046	.005	.005	.056	.064	.007	.009	.080	.068	.007	-----	.095
Averages.....	.222	.008	.056	.286	.463	.011	.105	.579	.289	.008	.015	.312	.379	.014	.137	.530	.467	.013	.018	.498
POUNDS PER ACRE.																				
FIRST LINE—																				
First foot.....	29,400	280	5,600	35,280	40,680	480	6,840	48,000	43,600	360	3,960	47,920	36,560	400	3,960	40,920	26,320	560	5,760	32,640
Second foot.....	2,040	1,280	360	3,680	14,520	480	1,080	16,080	9,000	880	360	10,240	2,400	400	360	3,160	6,160	880	720	7,760
Third foot.....	1,120	560	-----	1,680	1,800	280	360	2,440	2,440	200	200	3,280	2,560	240	360	3,160	1,840	240	3,600	5,680
Fourth foot.....	920	200	-----	1,120	1,360	160	-----	1,960	3,080	200	-----	3,280	920	120	160	1,200	1,560	210	200	2,000
Totals.....	33,440	2,320	5,960	41,760	58,800	1,400	8,280	68,480	61,120	1,640	4,520	67,280	42,440	1,160	4,840	48,440	35,880	1,920	10,280	48,080
SECOND LINE—																				
First foot.....	20,720	480	3,600	24,800	25,520	400	2,160	28,080	60,480	600	1,440	62,520	35,920	400	3,320	39,640	26,200	400	3,240	29,840
Second foot.....	3,880	960	360	5,200	3,120	880	-----	4,000	2,520	1,280	200	4,000	5,440	600	360	6,400	5,120	1,040	360	6,520
Third foot.....	3,360	520	360	4,240	1,360	480	-----	1,840	2,120	280	-----	2,400	640	960	-----	1,600	4,360	80	360	4,800
Fourth foot.....	4,280	120	360	4,760	1,360	80	-----	1,440	2,200	160	-----	2,360	1,400	200	-----	1,600	2,440	200	160	2,800
Totals.....	33,440	2,080	4,680	40,200	31,360	1,840	2,160	35,360	67,320	2,320	1,640	71,280	43,400	2,160	3,680	49,240	38,120	1,720	4,120	43,960
THIRD LINE—																				
First foot.....	26,720	560	7,920	35,200	53,680	760	14,400	68,840	35,760	480	1,440	37,680	40,040	600	15,440	56,080	48,240	680	2,520	51,440
Second foot.....	2,600	560	720	3,880	8,480	560	2,160	11,200	5,880	480	360	6,720	12,560	600	5,040	18,240	14,160	680	360	15,200
Third foot.....	3,880	120	360	4,360	7,720	200	200	8,120	2,800	200	360	3,360	2,560	280	1,080	7,160	8,720	440	360	9,160
Fourth foot.....	2,340	80	-----	2,400	4,280	200	-----	4,480	1,840	200	200	2,240	2,560	280	360	3,200	3,520	280	-----	3,800
Totals.....	35,520	1,320	9,000	45,840	74,160	1,720	16,760	92,640	46,280	1,360	2,360	50,000	60,560	2,160	21,920	84,640	74,640	2,080	2,880	79,600

gypsum extensively in order to neutralize its carbonate of soda and bring it into cultivation. In order to ascertain the distribution of its alkali salts, the prong was divided into sections, and samples to a depth of 4 feet were taken by the foreman at regular intervals of 16 feet from a center line laid north and south. The results of analyses of each sample are given in the tables on page 41—the one showing percentage composition, and the other the calculated pounds per acre. The latter is the more intelligible of the two, and at the same time affords an easy means of determining the amount of gypsum needed to correct any carbonate of soda present, in spots large or small; for it is a well-known fact that alkali occurs only in spots or basins, often quite distant from each other, of varying sizes, and seldom covering an acre uniformly except in the broad desert regions, in old lake beds, or sometimes in lands improperly irrigated. If, therefore, results of analysis are expressed in pounds per acre, a farmer can easily determine the approximate amount held in a spot of less area.

A glance at the tables brings out a number of interesting points which are characteristic of all alkali beds or soils, viz., *unequal distribution*, even in small areas; *great variability in composition* from point to point; and *irregularity in composition*, even in a single soil column of 4 feet depth.

The *unequal distribution* is seen here by simple reference to the total amounts in each spot. We would naturally expect to find the highest amount in the central and northern portions of the tongue which would be nearer the center of the large alkali tract that lies chiefly outside of the station grounds, but on the contrary it is found on the southern border and at a distance respectively of 16 feet west and 16 and 32 feet east of the center line, and varying from 92,640 to 79,600 pounds per acre. The two extremes, with a difference of 47,280 pounds, lie within 16 feet of each other and to the west of the center. On the north, as already said, we would expect to find the highest amounts, because of the conjunction with the intense black alkali beds on the outside of the boundary fence; but we there find nearly 25,000 pounds less than on the south. And thus the variation continues throughout the entire series.

The same is true with regard to the individual salts. The maximum of sulfates occurs in the southeastern corner of the tongue; the next on the same southern line to the west of the center; while the third lies in the center. The minimum amount is in the soil 16 feet west of the latter, showing a falling off of 36,000 pounds within the 16 feet.

The maximum of carbonates is found in the center and in the north-west corner of the tongue, while the minimum occurs just to the east of the center line.

The maximum of chlorids is found on the southern line and 16 feet to the east. Immediately to the west, there is a falling off of nearly 19,000 pounds, and then still westward an increase of more than 14,000 pounds. The minimum of common salt is found in the center of the tongue, while there is an increase in every direction.

Considerable *variability in composition* is seen everywhere, when we calculate the percentage of each salt with reference to the total amounts both in each foot and in the summation of each soil column. Taking the latter, we find the following percentage composition:

PERCENTAGE COMPOSITION OF TOTAL ALKALI SALTS IN THE 4-FOOT COLUMNS.

	32 feet West.			16 feet West.			Center.			16 feet East.			32 feet East.		
	Sulfates.	Carbonate	Chlorid	Sulfates.	Carbonate	Chlorid	Sulfates.	Carbonate	Chlorid	Sulfates.	Carbonate	Chlorid	Sulfates.	Carbonate	Chlorid
First line	80	6	14	86	2	12	91	2	7	88	2	10	74	4	22
Second line	83	5	12	89	5	6	95	3	2	89	4	7	87	4	9
Third line	77	3	20	80	2	18	92	3	5	72	3	25	94	3	3

In this table the sulfates vary from 72 to 95 per cent, the carbonates from 2 to 6 per cent, and the chlorids from 2 to 25 per cent in the make-up of the total alkali in the soil columns. The sulfates are highest in percentage composition in the central, north and south series, and on the southeast corner; and are lowest on the south intermediate between two of the highest, and on the northeast and southwest corners. The chlorids are highest in this regard along the south line of the series with the exception of the southeast corner, and lowest in the center.

The following conclusions may be drawn from the tables:

First—Alkali of similar strengths or similar composition is not continuous over an area of more than a few feet, and may vary very materially even at nearer points.

Second—There is a very great difference and variability in the composition of each of the several salts in adjoining soil columns, being within danger limits in one, and below the danger point for cultures in the other. Thus a culture sensitive to carbonate of soda and not to common salt might grow at a point 16 feet east of the center line with its 1,160 pounds of carbonate, while it would suffer if planted 16 feet to either side, where the carbonate is 1,600 or 1,900 pounds. And similarly with reference to common salt on adjacent spots. This effect of varying amounts of an injurious salt is often felt in orchards and is marked by the suffering of single trees here and there.

Third—The rise of alkali toward the surface is seen in the accumulation of the several salts within the upper two feet in each soil column, and in the progressive diminution downward from foot to foot; but the irregularity in rise is apparent when we take each salt in the column into consideration.

The carbonates show greatest irregularity in vertical distribution, for in nine of the fifteen columns the amount in the top foot is less than that in the second or sometimes even the third foot. This is doubtless in part due to the uneven solution and percolation of the gypsum that had been applied for the neutralization of the carbonate, and which has acted chiefly in the first foot; but the decrease of carbonates toward the surface is a general fact, doubtless due to the natural reactions of alkaline and earthy sulfates and carbonates, discussed in Bulletin No. 108 of this Station. There is one instance where the carbonate is less in the third than in the fourth foot.

The sulfates comprise the larger part of the salts, and in every case

are concentrated in the upper foot. The second foot in all spots but two holds the next highest amount, while the third in turn holds the next highest in all cases but three.

The chlorid has in nine cases risen entirely out of the fourth foot; in eight it is concentrated in the upper two feet, and in one has risen entirely into the first foot. In all of the columns its accumulation is chiefly in the first foot, and only once does the second foot contain less than the third foot. Its progressive diminution downward is therefore more regular than that of the sulfates, doubtless because of its more ready solubility and mobility.

The fact, then, is self-evident, both from the very irregular distribution and the strength of the various salts of alkali in the alkali spots, and from the irregular distribution of the spots themselves in lands that are otherwise free from alkali, that we can not in justice to the land and to the reputation of an agricultural region, map out any large region as containing alkali salts of definite strength. It would not be safe to say that tracts even of an acre in area throughout the San Joaquin and southern California valley regions contain alkali of a certain strength, for as shown above and in other publications of this Station, the differences may be very great within every few feet, and it seldom occurs that alkali of a destructive strength occupies as much as an acre in extent. Even the Tulare substation, situated in the midst of what is known as an alkali region, has the larger part of its area free from alkali. Of course, as already stated, there are exceptions, but even in the Imperial region of the Colorado Desert we have this great variation within short distances, as shown in Bulletin No. 140. There is a natural prejudice against alkali lands, however rich they may be, and prospective settlers are apt to overlook the fact that while in spots the alkali may be of such a character and strength as to prevent crop growth, yet there is usually a large body of good land outside of these spots, and that the spots themselves may often be freed of their alkali by proper methods of under-drainage. It has therefore been the policy of this Station not to outline on its maps the regions containing alkali.

Alkali Soils from the Ten-Acre Experiment Tract near Chino.—In former examinations of the soils of this tract, the alkali was determined only in the surface foot of each plot. To ascertain the extent to which it occurs below the upper foot, samples of soil were taken from a number of the plots and submitted to analysis. The following table shows the results obtained:

ALKALI SOILS FROM THE TEN-ACRE TRACT OF EXPERIMENT STATION AT CHINO.

	Percentage.				Pounds per Acre.			
	Sulfates	Carbonate	Chlorid	Total	Alkali Sulfates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
PLOT No. 8—								
First foot	.057	.024	trace	.081	2,280	960	trace	3,240
Second foot	.005	.020	trace	.025	200	800	trace	1,000
Third foot	.185	.015	trace	.200	7,400	600	—	8,000
In 3 feet	.082	.020	trace	.102	9,880	2,360	trace	12,240
PLOT No. 19—								
First foot	.025	.013	trace	.038	1,000	520	trace	1,520
Second foot	.011	.011	trace	.022	440	440	trace	880
Third foot	.002	.012	trace	.014	80	480	—	560
In 3 feet	.013	.012	trace	.025	1,520	1,440	trace	2,960
PLOT No. 34—								
First foot	.043	.017	trace	.060	1,720	680	—	2,400
Second foot	.004	.010	trace	.014	160	400	—	560
Third foot	trace	.012	trace	.012	—	480	—	480
In 3 feet	.016	.013	trace	.029	1,880	1,580	—	3,440
PLOT No. 43—								
First foot	.040	.019	trace	.059	1,600	760	—	2,360
Second foot	.003	.012	trace	.015	120	480	—	600
Third foot	.005	.014	trace	.019	200	560	—	760
In 3 feet	.016	.015	trace	.031	1,920	1,800	—	3,720
PLOT No. 44—								
First foot	.017	.019	trace	.036	680	760	—	1,440
Second foot	.002	.014	trace	.016	80	560	—	640
Third foot	.009	.009	trace	.018	360	360	—	720
In 3 feet	.009	.014	trace	.023	1,120	1,680	—	2,800
PLOT No. 45—								
First foot	.048	.032	trace	.080	1,920	1,280	—	3,200
Second foot	.015	.011	trace	.026	600	440	—	1,040
Third foot	.014	.010	trace	.024	560	400	—	960
In 3 feet	.026	.018	trace	.044	3,080	2,120	—	5,200
PLOT No. 63—								
First foot	.007	.017	trace	.024	280	680	—	960
Second foot	.020	.008	trace	.028	800	320	—	1,120
Third foot	trace	.008	trace	.008	—	320	—	320
In 3 feet	.009	.011	trace	.020	1,080	1,320	—	2,400

A glance at the above figures shows an absence of common salt, and that only in Plots Nos. 8 and 45 does the carbonate of soda reach the danger point, but may be easily neutralized by gypsum. The sulfates are large in Plot No. 8, but hardly sufficiently so to be of injury to cultures.

Alkali soils from Section 36, near Indio, San Diego County. The samples were taken 4 feet in depth by J. F. Abbott. The ranch is described as being profusely covered with mesquit of large size and

spread of limbs, and which appears especially on the southern portion of the ranch as a tree with a maximum diameter of from 2 to 2½ feet at the base; on the northern part of the ranch, there are places, some of them exceeding an acre in area, so densely covered with mesquit as to be impenetrable and with a growth of about 30 feet in height. On the ranches south of this tract good crops of melons, corn and sorghum have been obtained, the water for irrigation coming from artesian wells.

The first two of the samples analyzed were taken from a field of from ten to fifteen acres where alfalfa was growing. The third is from a vineyard of three acres. The fourth and fifth are from the west and east side, respectively, of a muskmelon patch of nine acres. The others are from portions of the ranch where cultures were failures.

Averages of Four Feet Depth.	Percentage.					Pounds per Acre.				
	Sulfates	Carbonate	Chlorid	Nitrate	Total	Alkali Sul-fates	Carbonate of Soda	Chlorid of Sodium	Nitrate of Soda	Total Alkali
Good growth of alfalfa	trace	.017	.009		.026		2,720	1,440		4,160
Good growth of alfalfa	trace	.021	.009		.030		3,360	1,440		4,800
Vineyard	.073	.024	.147	.002	.246	11,680	3,840	23,520	320	39,360
Muskmelon patch	.060	.025	.501	.007	.593	9,600	4,000	80,160	1,120	94,880
Muskmelon patch	.254	.044	.408	.009	.715	40,640	7,040	65,280	1,440	114,400
Dense salt-weed	.139	.046	1.707	.002	1.894	22,240	7,360	273,120	320	303,040
Dense salt-weed	.416	.025	2.598		3.039	66,560	4,000	415,680		486,240
Mesquit growth	.141	.037	.694	.001	.873	22,560	5,920	111,040	160	139,680
Near irrigation ditch	.076	.017	.627		.720	12,160	2,720	100,320		115,200
No. 15	.336	.033	1.707		2.076	53,760	5,280	273,120	160	332,320
No. 16	.112	.019	.529		.660	17,920	3,040	84,640		105,600
Alkali crust	2.736	.184	16.520		19.440					
No. 18	.383	.329	4.528		5.240	61,280	52,640	724,480		838,400
No. 20	.267	.022	.965		1.254	42,720	3,520	154,400		200,640
No. 22	.142	.026	1.531		1.699	22,720	4,160	244,960		271,840
No. 24	.187	.037	1.096	.002	1.322	29,920	5,920	175,360	320	211,520
No. 26	trace	.021	.405		.426		3,360	64,800		68,160
No. 28	.015	.017	.195		.227	2,400	2,720	31,200		36,320
No. 30	.041	.041	.398		.480	6,560	6,560	63,680	160	76,960
No. 32	.052	.022	.036	.002	.112	8,320	3,520	5,760	320	17,920
No. 34	.063	.024	.139	.002	.228	10,080	3,840	22,240	320	36,480
Alkali crust	.582	.712	7.053		8.347					
No. 36	.956	.368	6.012	.028	7.364	152,960	58,880	961,920	4,480	1,178,240

The above results are not surprising as to the large amount of alkali, coming as the samples do, from near a region of salt beds. It is interesting to note the great variation in strength and composition in spots not far from each other. In all of the localities, common salt is the chief constituent, except in the alfalfa field, where carbonate of soda predominates.

It is unfortunate that samples of the first and second foot, respectively, were not sent for examination to determine more definitely the tolerance of the melon for alkali salts. In the above case, it is possible that irrigation water has carried the salts into the third and fourth foot out of the reach of the feeding roots.

Alkali soils from Indio, Riverside County; sent by A. Sarbaugh.

	Percentage.				Pounds per Acre.			
	Sulfates	Carbonate	Chlorid	Total	Alkali Sul-fates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
2 feet below surface	.227	.003	trace	.230	9,080	120	-----	9,200
4 feet below surface	.449	.003	.021	.473	17,960	120	160	18,920
Side of well at 4 feet	.153	.003	.252	.408	6,120	120	10,080	16,320
SERIES 1—								
First foot	.059	.004	.001	.064	2,360	160	40	2,560
Second foot	.106	.005	.065	.176	4,240	200	2,600	7,040
Third foot	.030	.005	.062	.097	1,200	200	2,480	3,880
Fourth foot	.022	.005	.078	.105	880	200	3,120	4,200
In 4 feet	.054	.005	.051	.110	8,680	760	8,240	17,680
SERIES 2—								
First foot	.045	.005	.002	.052	1,800	200	80	2,080
Second foot	.031	.007	.039	.077	1,240	280	1,560	3,080
Third foot	.022	.005	.039	.066	880	200	1,560	2,640
Fourth foot	.015	.005	.018	.038	600	200	720	1,520
In 4 feet	.028	.005	.025	.058	4,520	880	3,920	9,320

The carbonate of soda occurs in but small amounts in these soils, while the common salt is present in large amounts, as is usual in these desert lands.

Alkali soils from Coachella station; brought by G. Schoeffer, of Oakland.

	Percentage.				Pounds per Acre.			
	Sulfates	Carbonate	Chlorid	Total	Alkali Sul-fates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
First foot	.031	-----	.241	.272	1,240	-----	9,640	10,880
Second foot	1.218	-----	.410	1.628	48,720	-----	16,400	65,120
Third foot	.153	-----	.019	.172	6,120	-----	760	6,880
In 3 feet	.467	-----	.224	.691	56,080	-----	26,800	82,880

No alkali was found in the samples from the fourth and fifth foot, respectively. It seems to be concentrated in the second foot, although the first foot has more than 10,000 pounds per acre and that chiefly of common salt. The soil, however, is sandy in character and the alkali should be easily kept in the lower depths, if not carried entirely away by proper methods of irrigation. The soil otherwise is rich in elements of plant food—potash, phosphoric acid, and humus.

Alkali soils from Hynes, Los Angeles County; sent by G. A. Anderson.

	Percentage.				Pounds per Acre.			
	Sulfates	Carbonate	Chlorid	Total	Alkali Sul- fates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
From sand ridges, good soil and good crops—								
First foot	.027	.023	trace	.050	1,080	920	-----	2,000
Second foot	.017	.024	trace	.041	680	960	-----	1,640
Third foot	.019	.021	trace	.040	760	840	-----	1,600
Fourth foot	.005	.012	trace	.017	200	480	-----	680
In 4 feet	.017	.020	trace	.037	2,720	3,200	-----	5,920
From good pasture land—bur clover, foxtail, alfileria, etc.—								
First foot	.378	.038	.058	.474	15,120	1,520	2,320	18,960
Second foot	.249	.017	.094	.360	9,960	680	3,760	14,400
Third foot	.120	.014	.004	.138	4,800	560	160	5,520
Fourth foot	.050	.009	trace	.059	2,000	360	-----	2,360
In 4 feet	.199	.019	-----	.218	31,880	3,120	6,240	41,240
Medium alkali—								
First foot	.157	.021	.002	.180	6,280	840	80	7,200
Second foot	.055	.011	.002	.068	2,200	440	80	2,720
Third foot	.013	.022	trace	.035	520	880	-----	1,400
Fourth foot	.005	.014	.001	.020	200	560	800	800
In 4 feet	.059	.017	.001	.077	9,200	2,720	960	12,120
Bad alkali—								
Loose puffy surface	3.495	14.118	.131	17.744	-----	-----	-----	-----
First foot	.293	1.065	.562	1.920	11,720	42,600	22,480	76,800
Second foot	.034	.092	trace	.126	1,360	3,680	-----	5,040
Third foot	.017	.040	trace	.057	680	1,600	-----	2,280
Fourth foot	.005	.050	trace	.055	200	2,000	-----	2,200
In 4 feet	.087	.312	.140	.539	13,960	49,880	22,480	86,320
Alkali flats—								
First foot	.119	.180	.032	.331	4,760	7,200	1,280	13,240
Second foot	.029	.047	.007	.083	1,160	1,880	280	3,320
Third foot	.022	.034	trace	.056	880	1,360	-----	2,240
Fourth foot	.004	.024	trace	.028	160	960	-----	1,120
In 4 feet	.043	.071	.010	.124	6,960	11,400	1,560	19,920
Bottom of sump—								
First foot	1.387	.628	.222	2.237	55,480	25,120	8,880	88,480
Sand ridge—								
First foot	.007	.013	trace	.020	280	520	-----	800
Fourth foot	.002	.008	trace	.010	80	320	-----	400

It is interesting to note in the above analyses that bur clover and grasses will tolerate such high amounts of the respective alkali salts as are found in the good pasture land and that, too, when concentrated in the upper two feet of soil. This is the first record we have of bur clover in saline land. It has heretofore been found growing in soils having 11,000 pounds of carbonate of soda per acre, and we now find that it tolerates as much as 6,000 pounds of common salt per acre. Foxtail grass and alfileria also tolerate this amount of common salt.

The "bad alkali" land in the above table is very heavily charged

with carbonate of soda and common salt—especially in the surface foot. This would seem to be a case where shoveling up the alkali surface and carting it off would quickly rid these spots of their injurious features and render them susceptible of profitable tillage. The carbonate remaining behind could be neutralized with gypsum.

Alkali soils from near Lancaster on Mojave plateau; sent by M. R. Lyle of Oakland. On soil No. 1, alfalfa was in good condition. On soil No. 2, about four rods from No. 1, alfalfa was not quite as tall, and the leaves slightly pale in color. On soil No. 3, about two rods from No. 2, alfalfa was dying.

	Percentage.				Pounds per Acre.			
	Sulfates	Carbonate	Chlorid	Total	Alkali Sulfates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
No. 1. Best alfalfa—								
First foot.....	.011	.017	trace	.028	440	680	.....	1,120
Second foot.....	.013	.015	trace	.028	520	600	.....	1,120
Third foot.....	.004	.013	trace	.017	160	520	.....	680
Fourth foot.....	.012	.010	trace	.022	480	400	.....	880
In 4 feet.....	.010	.014	trace	.024	1,600	2,200	.....	3,800
No. 2. Alfalfa in distress—								
First foot.....		.010	.....	.010		400	.....	400
Second foot.....		.010	.....	.010		400	.....	400
Third foot.....	.014	.034	.....	.048	560	1,360	.....	1,920
Fourth foot.....	.019	.031	.....	.050	760	1,240	.....	2,000
In 4 feet.....	.008	.021	.....	.029	1,320	3,400	.....	4,720
No. 3. Alfalfa dying—								
First foot.....	.002	.012	trace	.014	80	480	.....	560
Second foot.....	.017	.012	trace	.029	680	480	.....	1,160
Third foot.....	.008	.017	trace	.025	320	680	.....	1,000
Fourth foot.....	.007	.012	trace	.019	280	480	.....	760
In feet.....	.009	.013	trace	.022	1,360	2,120	.....	3,480
Five miles from Lancaster—								
Crust, 2 inches.....	14.266	.773	27.481	42.520				
First foot.....	.323	.061	.378	.762	12,920	2,440	15,120	30,480
Second foot.....	.191	.043	.360	.594	7,640	1,720	14,400	23,760
Third foot.....	.224	.032	.342	.598	8,960	1,280	13,680	23,920
Fourth foot.....	.030	.036	.084	.150	1,200	1,440	3,360	6,000
Four feet 8 inches.....	.024	.026	.006	.056	640	700	160	1,500
In 4½ feet.....	.158	.040	.234	.432	31,360	7,580	46,720	85,660
One mile from the above—								
First foot.....	.123	.214	.229	.566	4,920	8,560	9,160	22,640
Second foot.....	.018	.086	trace	.104	720	3,440	.....	4,160
Third foot.....	.016	.082	.002	.100	640	3,280	80	4,000
Fourth foot.....	.013	.014	.001	.028	520	560	40	1,120
Four feet 8 inches.....	.070	.012	.072	.154	1,840	320	1,920	4,080
In 4½ feet.....	.048	.081	.061	.190	8,640	16,160	11,200	36,000

The alkali of the alfalfa fields is not large, but consisting as it does largely of carbonate of soda, renders the neutralization with gypsum

necessary as a precautionary measure. The alfalfa in No. 3 was clearly dying from some other cause than the carbonate, for it grew well in a larger amount.

One of the tracts, five miles from Lancaster, is too highly charged with both carbonate and chlorid of sodium to be safe for most cultures.

Alkali soils from the Colorado Delta; sent by Dewitt B. Williams, La Mesa. The samples were taken from several localities. Nos. 1 to 4 are averages of each foot of a soil section to a depth of 4 feet. No. 5, the surface foot of a spot one half mile from the last locality, and on the N.E. $\frac{1}{4}$ of Sec. 25, T. 14 S., R. 13 E. No. 6, taken from 6 to 10 inches deep on a spot one fourth mile from No. 1. No. 7, from N.W. $\frac{1}{4}$ of same section, had but a small amount of alkali. The analyses were made by Professor Colby.

	Percentage.					Pounds per Acre.				
	Sulfates	Carbonate	Chlorid.	Nitrate	Total	Alkali Sulfates	Carbonate of Soda	Chlorid of Sodium	Nitrate of Soda	Total Alkali
Nos. 1 to 4—										
First foot	.081	trace	.039	.003	.123	3,240	-----	1,560	120	4,820
Second foot	.044	trace	.116	.006	.166	1,760	-----	4,640	240	6,640
Third foot	.147	trace	.081	.015	.243	5,880	-----	3,240	600	9,720
Fourth foot	.065	trace	.035	.021	.121	2,600	-----	1,400	840	4,840
In 4 feet	.084	trace	.068	.011	.163	13,480	-----	10,840	1,800	26,020
No. 5	.088	trace	.812	.002	.902	3,520	-----	32,480	-----	36,000
No. 6	.081	trace	.609	.003	.693	810	-----	6,090	-----	6,900

Common salt is the chief injurious element in these soils, and its amount is especially large in No. 5. The usual method of deeply saturating the land by irrigation water to carry the salt down out of the way of plant roots and thence out by subdrainage is the only means of relief.

Alkali soils from Fowler, Fresno County. The samples were each taken four feet in depth. Sent by R. D. Vandeburg.

	Percentage.				Pounds per Acre.			
	Sulfates	Carbonate	Chlorid.	Total	Alkali Sulfates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
N.E. $\frac{1}{2}$ Sec. 22, R. 9 E.	.027	-----	.019	.046	4,320	-----	3,040	7,360
Center Sec. 22, R. 9 E.	.121	-----	.009	.130	19,360	-----	1,440	20,900
N.W. $\frac{1}{4}$ Sec. 35, R. 9 E.	.015	-----	.009	.024	2,400	-----	1,440	3,840
N. $\frac{1}{2}$ Sec. 27, R. 9 E.	.012	-----	.018	.030	1,920	-----	2,880	4,800
S. $\frac{1}{2}$ Sec. 27, R. 9 E.	.029	-----	trace	.029	4,640	-----	-----	4,640
N.W. $\frac{1}{4}$ Sec. 33, R. 9 E.	.109	-----	.009	.118	18,440	-----	1,440	20,380
N.E. $\frac{1}{4}$ Sec. 24, R. 10 E.	.073	-----	.019	.092	11,680	-----	3,040	14,720

The samples from the northeast half of section 22 and the north half of section 27 of R. 9 E. and the northeast quarter of section 24, R. 10 E., are the only ones that show any dangerous amounts of common salt, although many cultures would easily tolerate these. The large amount of glauber salt in the center of section 22 and the northwest quarter of section 33 might make some plants sick, but the grains tolerate even more than this.

Alkali soils from Exeter, Tulare County; sent by B. F. Teague.

	Percentage.				Pounds per Acre.			
	Sulfates	Carbonate	Chlorid	Total	Alkali Sulfates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
Soil .....	.003	.003	trace	.006	120	120	.....	240
Subsoil .....	.135	.033	trace	.168	5,400	1,320	.....	6,720
For 2 feet .....	.069	.018	trace	.087	5,520	1,440	.....	6,960

But little danger is to be feared from the amount of alkali in the above, unless, as seems possible, there is a larger accumulation in the third and fourth feet; in which case, its rise to the surface may be anticipated. Provision should be made against the latter condition by proper cultivation and maintaining a loose surface three inches deep.

Alkali soils from Corona, Riverside County. No. 1 was from H. L. Rollins; No. 2 from F. Sears.

	Percentage.				Pounds per Acre.			
	Sulfates	Carbonate	Chlorid	Total	Alkali Sulfates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
No. 1. First foot .....	.016	.008	trace	.024	640	320	.....	960
Second foot .....	.014	.004	trace	.018	560	160	.....	720
Third foot .....	.062	.004	trace	.066	2,480	160	.....	2,640
In 3 feet .....	.031	.005	trace	.036	3,680	630	.....	4,320
No. 2. First foot .....	.005	.007	.028	.040	200	280	1,120	1,600
Second foot	trace	.008	.054	.062	trace	320	2,160	2,480
Third foot .....	.004	.008	.038	.050	160	320	1,520	2,000
In 3 feet .....	.003	.008	.040	.051	360	920	4,800	6,080

The only danger in the above soils lies in the common salt (chlorid) of the second group of samples, the 4,800 pounds being excessive for citrus fruits. The remedy consists in percolation of irrigation water to many feet depth (which would take the alkali with it) and subsequently keeping the soil loose on the surface three or more inches to prevent the rise of the alkali.

Alkali soils from Fresno County. No. 1 was from near Fresno, and was sent by J. G. Davis. No. 2 was from P. J. Rice, of Bridge, Fresno County.

	Percentage.				Pounds per Acre.			
	Sulfates	Carbonate	Chlorid	Total	Alkali Sulfates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
No. 1. First foot	.009	.010	.041	.060	360	400	1,640	2,400
Second foot	trace	.007	.003	.010	trace	280	120	400
Third foot	trace	.007	.021	.028	trace	280	840	1,120
Fourth foot	trace	.007	.005	.012	trace	280	200	480
In 4 feet	.002	.007	.018	.027	360	1,240	2,800	4,400
No. 2. First foot	.033	.010	.019	.062	1,320	400	760	2,480
Second foot	.008	.009	.005	.022	320	360	200	880
Fourth to 5½ foot	.006	.008	trace	.014	240	320	-----	560
Hardpan	.009	.010	.005	.024	360	400	200	960
In 5½ feet	.009	.006	.005	.020	2,240	1,480	1,160	4,880

The amount of carbonate of soda in each of the above groups is not very large, and its alkalinity can easily be neutralized by gypsum at the rate of a ton per acre. The common salt (chlorid) is rather excessive in the soil from near Fresno, but proper use of irrigation water will keep it below the danger point.

Alkali soils sent by Miss Mimi Martin, of Pasadena. These soils have the same character as those from the Colorado Desert, and like them also contain alkali. No. 1 had 0.182 per cent of total salts, while No. 2 had 0.044; in each case only of sulfate and chlorid, the former predominating.

Soils from the San Joaquin River bottom land, near Bridge, Fresno County; sent by S. B. Pollard. These samples, representing 6 feet in depth, were sandy and well supplied with phosphoric acid, potash, and humus; they had an average of only 1,800 pounds of sulfate of soda per acre in the 6 feet.

ADDITIONAL ANALYSES.

By G. W. SHAW.

Alkali soil from Fort Yuma Indian School, Yuma, Arizona; sent by John S. Spear, superintendent. The examination showed the following results:

	No. 1.		No. 2.		No. 3.		No. 4.	
	Per cent	Lbs. per Acre in 1 foot.	Per cent	Lbs. per Acre in 1 foot.	Per cent	Lbs. per Acre in 1 foot.	Per cent	Lbs. per Acre in 1 foot.
Alkali sulfates .....	.303	12,120	.073	2,920	.249	39,840	.040	6,400
Sodium chlorid.	8.352	334,080	.519	20,760	2.969	475,048	.464	74,240
Sodium carbonate .....	.002	160	trace	trace	trace	trace	trace	trace
Totals	8.657	346,360	.582	23,680	3.218	514,888	.504	80,640

The soils all belong to the white alkali type and the principal harmful ingredient is common salt, which is present in all samples to an extent harmful to any except the most resistant vegetation.

The person sending this soil says that on the best of the land wheat, barley, and sorghum have been grown, but on the worst the seeds have never germinated. On these spots the soil is dark and damp and a white crust forms on the top. The soil does not sub-irrigate to any advantage.

Alkali soils from near Indio, Coachella Valley, 8 miles from Salton; sent by W. D. Smith, Redlands. The samples numbered 1 and 3 were taken from Sec. 32, T. 7 S., R. 10 E., and No. 4 from Sec. 22, T. 7 S., R. 9 E. The samples were found to contain:

Number.	Depth, in inches.	Percentage.				Pounds per Acre.			
		Sulfates	Carbonate	Chlorid.	Total	Alkali Sulfates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
1 A	7	.501	trace	3.364	3.865	11,690	trace	78,470	90,160
1 B	48	.084	trace	1.114	1.198	13,440	trace	178,200	191,680
3 A	10	.051	trace	.009	.060	1,700	trace	300	2,000
3 B	48	.116	trace	.042	.158	18,560	trace	6,720	25,280
4 A	10	.007	trace	.005	.012	230	trace	170	400
4 B	48	.047	trace	.153	.200	7,520	trace	24,480	32,000

The soils were all very sandy and carried a large number of small shells, indicating a high lime content. The potash and phosphoric acid content was high and the humus very low, a condition which has been found to be true of a large number of other soils from this region. The chemical and physical nature of these soils is similar to that of the soils described in Bulletin No. 140, except so far as their content of common salt is concerned; these samples have a much higher content of the latter.

The alkali content of No. 1 is high enough to remove it entirely from the class of good agricultural land. In the case of No. 3 the soluble-salt content is probably not too high to prevent the growing of the more alkali resistant crops, but it should be noted that about one fourth of the total salts present are common salt.

Alkali soils from the Salton Basin, Sec. 36, T. 16 S., R. 14 E.; sent by George D. Abrams, Imperial. These soils are clays of the very stiffest character, and similar to those described in Bulletin No. 140, lying along New River. Analysis shows as follows:

Sample.	Depth, in inches.	Percentage.				Pounds per Acre.			
		Sulfates	Carbonate	Chlorid	Total	Alkali Sul-fates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
A	12	.013	.004	.157	.174	520	160	6,280	6,960
	24	.002	trace	.037	.039	80	trace	1,420	1,560
	36	.005	trace	.008	.013	200	trace	320	520
In 3 feet		.007	.001	.068	.076	800	160	8,020	9,040
B	12	trace	trace	trace	trace	trace	trace	trace	trace
	24	.316	trace	.004	.320	12,640	trace	160	12,800
	36	.028	trace	.008	.036	1,120	trace	320	1,440
In 3 feet		.115	trace	.004	.119	13,840	trace	480	14,240

The high alkali content of these soils, coupled with their heavy clay character, renders them difficult to handle. The redeeming feature lies in the decrease of the alkali in the lower depths, and it is barely possible that they may take water to a sufficient degree to render leaching-down of the salt possible.

Alkali soils from the John S. Dore farm, Fresno; sent by O. V. P. Stout, of Lincoln, Nebraska, in connection with drainage investigations being undertaken on this land by the Office of Irrigation Investigations, U. S. Department of Agriculture. The sample represents a section to a depth of 6 feet.

Depth, in Inches.	Percentage.				Pounds per Acre.			
	Sulfates	Carbonate	Chlorid	Total	Alkali Sul-fates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
Crust	1.030	trace	3.190	4.220				
0-12	1.840	.254	.248	2.340	73,600	10,160	9,920	93,680
12-24	1.005	trace	.041	1.046	40,200		1,640	41,840
24-36	.010	trace	.026	.036	400		1,040	1,440
36-48	.002	.000	.014	.016	80		560	640
48-60	.000	.000	.014	.014			560	560
In 5 feet	.571	.051	.069	.691	114,280	10,160	13,720	138,160

The general character of the soil is a sandy loam, and the hardpan layers are very calcareous. The peculiar feature to be noted in this soil

is the large proportion of common salt in the crust. This salt seems to be accumulated in the crust to a much greater extent than any of the other ingredients in the alkali. The soil is at present poorly drained, which renders the leaching-down process impracticable. It is noteworthy that the alkali practically stops at the depth of 2 feet.

Alkali soils from Barnes, San Diego County; sent by Harry Cross. No. 1 is a silty clay, and represents a depth of 12 inches. No. 2 is a sandy undersoil carrying some silt, and is quite similar to the Salton silts; depth, 12 to 28 inches. No. 3 is a very compact clay; depth, 28 to 44 inches. No. 4 is similar to No. 3; depth, 8 inches. Analysis shows as follows:

Number.	Percentage.				Pounds per Acre.			
	Sulfates	Carbonate	Chlorid	Total	Alkali Sulfates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
No. 1	.029	trace	.156	.185	1,160	trace	6,240	7,400
No. 2	.037	trace	.009	.046	1,970	trace	480	2,450
No. 3	.061	trace	.032	.093	3,250	trace	1,700	4,950
No. 4	.080	trace	.023	.103	2,130	trace	610	2,740
Depth, 52 inches	.052	trace	.055	.107	8,510	trace	9,030	17,540

These samples might well be classed with the soils of the Salton Basin, as they closely resemble those of the New River region. They are deficient in humus and phosphoric acid; rich in lime, and fairly well supplied with potash. On account of its physical nature and its alkali content the soil could not be highly recommended for agricultural purposes. The existence of an exceedingly tough hardpan at a depth of but 28 inches hardly leaves a sufficient depth for agricultural operations except with the very shallow-rooting crops.

Alkali soils from near Imperial, San Diego County; sent by Dr. F. C. Jones, of Redondo, Cal.

Depth, in Inches.	Percentage.				Pounds per Acre.			
	Sulfates	Carbonate	Chlorid	Total	Alkali Sulfates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
0-12	.056	trace	.250	.306	2,240	-----	10,000	12,240
12-24	.035	trace	.241	.276	1,400	-----	9,640	11,040
24-36	.312	trace	.199	.511	12,480	-----	7,960	20,440
In 3 feet	.134	trace	.230	.364	16,120	-----	27,600	43,720

The soil is of a loose sandy and highly calcareous nature; phosphoric acid content excellent, potash and lime good, and humus very poor. The high per cent of common salt present, and extending as it does to

the entire depth of 3 feet, as shown in the table, takes it without the class of good agricultural lands, unless the layers below this depth are comparatively free from alkali and this salt of the upper soil can be leached down to the lower depths. While this sample may not fairly represent the entire region, yet it is well to bear in mind that these alkali spots of greater or less area exist in the region, and in the selection of land to avoid them where possible.

Alkali (salty) soils from Reclamation, Sonoma County; sent by A. J. Larsen, San Francisco. These soils were taken from a field in which sugar-beets had failed to produce a good crop. All eight samples were taken from the same land and in each case to a depth of 3 feet. The distinction between high and low places is made on account of the fact that on the former a light tonnage was obtained, but on the low places the crop was an entire failure. Examination of the samples showed results as follows:

		Percentage.				Pounds per Acre.			
		Sulfates	Carbonate	Chlorid	Total	Alkali Sulfates	Carbonate of Soda	Chlorid of Sodium	Total Alkali
No. 1.	High land	.123	-----	.037	.160	4,920	-----	1,480	6,400
	Low land	1.347	-----	.863	2.210	53,880	-----	34,520	88,400
No. 2.	High land	.143	-----	.131	.274	5,720	-----	5,240	10,960
	Low land	1.294	-----	1.270	2.564	51,760	-----	50,800	102,560
No. 5.	High land	.064	-----	.116	.180	2,560	-----	4,640	7,200
	Low land	.470	-----	2.088	2.558	18,800	-----	83,520	102,320
No. 6.	High land	.204	-----	.304	.508	8,160	-----	12,160	20,320
	Low land	.531	-----	1.299	1.830	21,240	-----	51,960	73,200

The table clearly shows the difference between the amount of soluble salts present in the high and low places, and no doubt explains in a large measure the cause of failure of the crop. In addition to the high soluble-salt content of these soils they are also generally acid in character, a condition not at all desirable, especially for this crop.

Alkali soil from tule land near Suisun, Solano County; sent by A. J. Larsen, San Francisco. The soil of this region is spotted with alkali, and a sample from one of the worst spots shows on analysis as follows:

	Per Cent.	Pounds per Acre.
Alkali chlorids	.147	5,880
Alkali carbonates	.016	640
Alkali sulfates	.229	9,160
Totals	.392	15,680

The soil is very stiff, but takes water quite readily on account of the large per cent of humus contained. It should be classed among the salt tule lands, but its treatment has not been such as to thoroughly reclaim it and put it into good agricultural condition. In its present state any

crop is sure to be very uneven upon it. Another sample of this same land examined carried but 0.053 per cent of total salts to a depth of 3 feet, which is no higher than may be found in many of the best agricultural soils of the State. Between these two extremes may be found all grades of white alkali conditions. The high lime, phosphoric acid, and humus content of these soils will render them very valuable when once they have been thoroughly drained and put into good physical condition.

PRELIMINARY PLANS AND ESTIMATES FOR DRAINAGE OF FRESNO DISTRICT, CALIFORNIA.*

By C. G. ELLIOTT, *Agent and Expert, Irrigation Investigations.*

Reprint of Circular No. 50, Office of Experiment Stations, U. S. Department of Agriculture.

THE OBJECT OF THE SURVEY.

The object of the investigations made by the Office of Experiment Stations of the Department of Agriculture in the vicinity of Fresno, Cal., during the summer of 1902, was to secure data from which plans for the drainage of surplus underground water could be intelligently made. The necessity for such drainage has been forced upon the attention of all observing fruit-growers and vineyardists. The facts are patent to every one, but the particular remedy to be applied has not been so clear by reason of the extent of territory involved, the surface and soil conditions peculiar to the section, and the elaborate improvements which have become an essential part of the Fresno surroundings. All of these and possibly other conditions must be taken into consideration in the development of any practical drainage plan.

The facts which emphasize the necessity of drainage and the difficulties to be met in securing it may be briefly enumerated. The lower soil, which formerly was dry and afforded ready drainage for water leaking from irrigating canals and that furnished by over-irrigation of lands which they serve, has become filled with water which shows at the surface in the lower areas and at varying heights in the soil over the entire tract of cultivated land. This water table or plane of saturation is not infrequently found within 2 feet of the surface, though its height is variable during the growing season. The effect of this condition is to injure growing crops in two ways. *First*, by reason of an excess of water in the soil, which is everywhere and at all times a hindrance to the proper growth and development of useful plants. It rots the roots of trees and vines and limits the productive depth of the soil to that portion lying between the water table of the soil and the surface, thus cutting off a large part of the available fertility peculiar to the soil of this district. *Second*, by reason of the excess of alkali which the abundance of water has dissolved from the soil and which, through the process of evaporation, has become concentrated at or near the surface. This deposit has not been made in one or two years only, but is the result of successive annual accumulations until in many localities entire vineyards have been destroyed and others are in the various stages of decline. That

* This report is based on surveys and plans made in 1902 by Prof. O. V. P. Stout, agent and expert, under the direction of Prof. Elwood Mead, Chief of Irrigation Investigations, and is preliminary to a more complete report to be made hereafter.

the evil is growing and threatens the final destruction of thousands of acres of valuable vineyard land is shown by the observations and opinions of the most careful cultivators.

WILL DRAINAGE BE BENEFICIAL?

That drainage will remedy the evils mentioned, and particularly that it will arrest the inroad of alkali and furnish a means for the reclamation of land already injured from this cause, has been shown in many publications of the Bureau of Soils of this Department and of the California Experiment Station. The following local instances of the beneficial effects of lowering the soil water are instructive in this connection.

Land which adjoins deep drainage channels, as the Selma Ditch or Kings River at Reedley, or land which occupies the higher portions of the cultivated area, is comparatively free from surface alkali. The example found in what is known as the Selma Sand Hollow, a name which is frequently used in referring to the most pronounced of the ranges of depressions which are embraced in the area surveyed, located in T. 16 S., R. 22 E., furnishes a striking illustration of the success of drainage experiments. About fifteen years ago a number of interested land-owners became alarmed at the rise of the ground water in that locality and combined in making this depression continuous by excavating through the low, short bars which separated the ponds from one another, thereby providing cheaply a drainage channel which has been in effective operation ever since. The deep tule ponds situated in various localities contained an abundance of seepage water which is derived from land adjoining them and act as drainage receptacles giving, for the present at least, satisfactory drainage of the soil. As a rule the more level lands and those which lie farthest down the slope are those which suffer most from the effects of alkali.

EXTENT AND RESULTS OF THE SURVEY.

The survey made by the Office of Experiment Stations in the Fresno district was confined to a study of the engineering problems involved in the proper drainage of this region, and its results are intended to show what may be done to alleviate similar difficulties in irrigated regions where like conditions are found.

The survey made during the summer and fall of 1902 covered a territory of 300 square miles, and was made for the purpose of determining the surface slopes, investigating the position and kind of hardpan, the plane of subsoil water, the action of existing drains, and the character of such drainage water as could be obtained. Much information bearing upon the problem was obtained and is used in forming conclusions relating to the value and methods of drainage.

The territory demanding the most urgent and immediate drainage is that lying directly south and southwest of the city of Fresno, comprising about 28 square miles of highly cultivated vineyard land, or that which has been such. The surface slopes westerly, and in some instances southwesterly, about 5 feet per mile. The main irrigating canals extend in the direction of the greatest slope and parallel each other at intervals of from three quarters to one and one half miles. There is no drainage outlet nearer than the Fresno Slough, which is 15

miles distant, southwesterly from the city of Fresno. The district for which surveys and estimates have been made is bounded as follows: Beginning at the intersection of California and Chestnut avenues, which is the northeast corner of the district; thence westerly along California avenue; thence southwesterly on the south side of the ridge to Cornelia and Fresno avenues; thence south on Cornelia avenue to Washington avenue; thence east on Washington avenue, across the Southern Pacific and Santa Fé railroads to the southeast corner of Sec. 32, T. 14 S., R. 21 E.; thence north on the east line of Secs. 32 and 29 to North avenue; thence west to Chestnut; thence north on Chestnut to California avenue, the place of beginning.

DEPTH AND FREQUENCY OF DRAINS.

From investigations made here and elsewhere relative to the drainage of irrigated land which has become wet by seepage, it is learned that shallow drains, by which are meant those from 2 to $3\frac{1}{2}$ feet deep, do not prevent the rise of alkali to the surface, nor in many cases make the land sufficiently dry for the most profitable cultivation. A depth of from 5 to 7 feet for main drains, it is believed, will lower the water line to such a point that the accumulation of alkali at the surface will cease; and when once the surface excess is disposed of by the well-known methods of irrigation and cultivation, the land will be permanently restored.

The distance apart at which the drains should be placed is one half mile in east and west parallel lines. At this distance they will be accessible to owners of land on either side without great difficulty; and further, it is believed that they will reduce the water level uniformly over the entire area with the exception of such portions as have a persistent hardpan stratum at a depth less than that of the drains.

GENERAL PLANS.

While the depth and distance apart at which it is wise to place the main drains are quite clear, as determined by examinations so far made, there may be a choice of the kind of drains which it would be proper to use for the main drainage. Underdrains constructed of draintile have been sufficiently well tested at Fancher Creek Nursery and Sunny-side Vineyard to prove that soil water will readily reach them and flow away when an outlet is provided; and further that they will reduce the water level to a level approaching that of the floor level of the drains for a distance not yet determined. Deep, open ditches, when kept in good condition, will relieve adjacent land of seepage and drainage water. In either system the water must be disposed of constantly and not permitted to accumulate and back up in the drains, thereby raising the water line in the soil between them and partially defeating the object of their construction.

PLAN No. 1—OPEN-DRAINAGE SYSTEM.

The open system for the district described must have an intercepting outlet drain at the west which will receive and carry all water coming from the district in a southwesterly direction toward Fresno Slough. It should begin at the west side of Sec. 17, T. 14, R. 20, extend southwesterly, as shown upon the map, in the direction of the greatest slope of

the land a distance of 6 miles, having a full depth of 7 feet; then with a grade of $1\frac{1}{2}$ feet per mile for 2 miles, until the water is discharged upon the surface of the ground at a point 40 feet lower than the surface of the land where it started. This drain should be 12 feet wide on the bottom, with side slopes of 1 to 1 for the entire distance. It may be added that this ditch will be in line to receive drainage from the city of Fresno, as well as from the district.

The drains for the district will consist of eight parallel, open drains, one half mile apart, extending from the eastern boundary of the district directly west to the intercepting drain. They will have an average grade of 5 feet per mile; will be from 5 to 8 feet deep, 4 feet wide on the bottom, side slope of 1 to 1, and not less than 20 feet wide across the top. They will be constructed on one side of the avenues or roads, the excavated earth being thrown into the road and made into an embankment next to the property line. Where the ditches cross roads, bridges must be built; where they intersect irrigating canals, drains may be carried underneath by boxing or sewer pipe; where they come in front of and cut off entrance to private property, bridges must be built or the drain must be boxed and covered. Where the ditches cross railroad lines, large cast-iron culvert pipes may be used. All of these contingencies must be provided for, as well as the cost of right of way where, in some cases, the ditches do not follow roads.

The carrying out of this plan will involve the construction of 8 miles of intercepting outlet ditch and $65\frac{1}{2}$ miles of interior or lateral ditches. The estimate of the cost of this work, including bridges, right of way where public roads do not exist, organizing, legal, and other expenses may be stated as follows:

ESTIMATE FOR OPEN DRAINS.

Intercepting Outlet.

6 miles of ditches, bottom width 2 feet, depth 7 feet—25,977 cubic yards per mile, at 15 cents	\$23,379 00
1 mile of ditch, bottom width 12 feet, depth 5 feet—16,579 cubic yards, at 10 cents	1,658 00
1 mile of ditch, bottom width 12 feet, depth 3 feet—8,817 cubic yards, at 10 cents	882 00
	<hr/>
	\$25,919 00

Lateral Drains.

[Estimate per mile.]

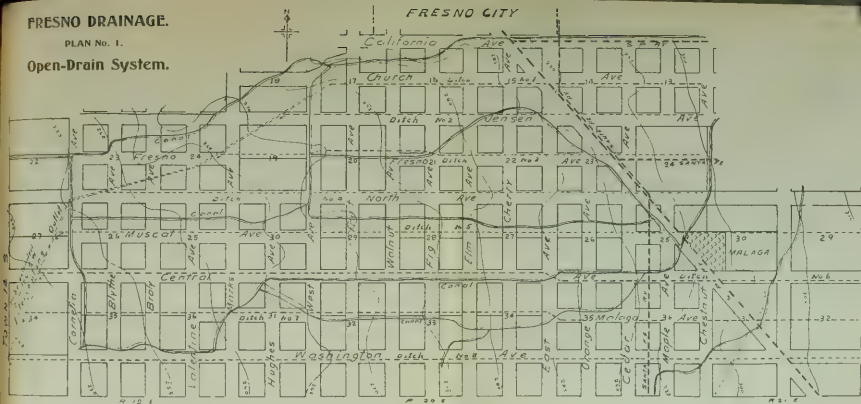
Average depth 7 feet, bottom 4 feet, side slopes 1 to 1—15,048 cubic yards, at 15 cents	\$2,257 00
2 highway bridges, at \$75	150 00
6 farm entrance bridges, at \$50	300 00
	<hr/>
	\$2,707 00
65½ miles, at \$2,707	\$177,308 00
23 boxed crossings for irrigation canals, at \$50	1,150 00
Railroad iron-pipe culverts	6,500 00
Right of way, 23¾ acres, at \$150	3,563 00
	<hr/>
	\$214,440 00
Organization, engineering, superintendence, etc., 10 per cent	21,444 00
	<hr/>
Total	\$235,884 00

The construction difficulties which will be encountered in the execution of this plan are of a somewhat uncertain nature. It will be necessary to make the excavations during the fall and early winter when the soil water is at its lowest stage. The intercepting ditch can probably be

FRESNO DRAINAGE.

PLAN No. 1.

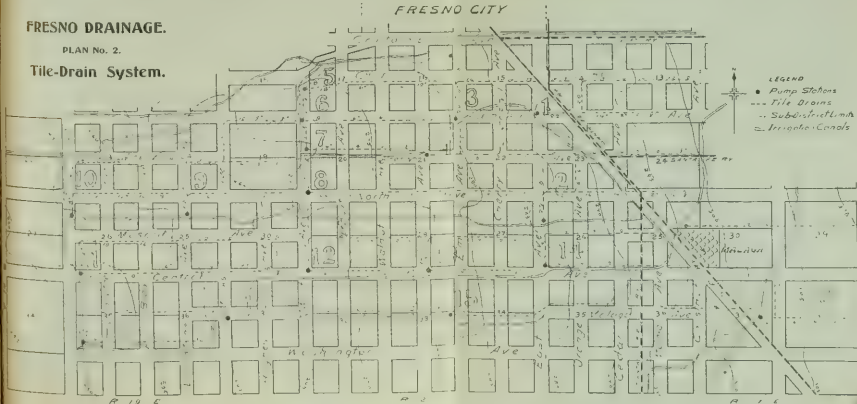
Open-Drain System.



FRESNO DRAINAGE.

PLAN No. 2.

Tile-Drain System.



constructed with a floating dredge more expeditiously and cheaply than by any other method, for the reason that sufficient water will likely be developed for floating the machine, in which case the work can be done at any season of the year. The parallel ditches may probably be made either wholly or in part by dry-land machines. A part of this work, however, will consist of the proper placing of the excavated earth in the form of road embankments. Hardpan will be an undetermined factor in the work, as will also spots of water-bearing soil or quicksand.

The careful cleaning and care of these ditches will be essential to their efficiency, for they must be kept clear and in condition to permit a ready flow of water over the bottom at all times. The loose character of the soil and the rapid growth of vegetation will make this a work requiring constant vigilance.

PLAN No. 2—COVERED OR TILE-DRAIN SYSTEM.

The tile-drain system will not require the open intercepting drain as an outlet. For this system the territory is divided into eighteen sub-districts averaging in size from 800 to 1,700 acres. Lines of tile ranging from 8 to 22 inches in diameter are laid in parallel lines along the avenues corresponding to the system described for open ditches. The ditches do not cross irrigation canals, except in a few instances. The discharge from the drains is received in a sump located near a canal, and is then lifted into it by a plant consisting of a suitable pump operated by an oil engine. The quantity of water which the drains are designed to carry and the pumps to lift is $2\frac{1}{2}$ cubic feet per second for each square mile. The drains will be laid 7 feet deep, their size being proportioned to the area which may be drained into the separate lines. For the purpose of making the drains accessible, so that they may be kept free from silt and roots, manholes constructed of redwood lumber, $2\frac{1}{2}$ by 4 feet, reaching 18 inches below the flow line of the drain, are placed at intervals of 400 or 500 feet. The necessity for this provision is quite apparent from an inspection of tile drains which have been laid in the vicinity. Local experience is that if the drains be laid 16 feet distant from a line of trees or vines but little difficulty from roots entering drains would be found. But this condition can not be met in this system of drains; so that it will be necessary to make ample provision for the constant scouring of the drains. They should be laid upon a board bed, and provision has been made for this in the estimates. No provision is made in the estimate for the purchase of right of way for drains, since any inconvenience or loss resulting to land during construction will be more than compensated for by reason of the proximity of the drains to the fields of the owners who will be inconvenienced.

ESTIMATE OF COST.

The newness of this class of work here, and the difficulty of getting at the probable prices at which large draintile can be obtained, give an uncertainty to the estimate for this plan. In this estimate the cost of pumping plant, manholes, material, labor, organization, legal fees, engineering, and superintendence have been provided for; also, a liberal price has been allowed for excavation because of the unknown and indeterminate part which hardpan and caving soil will play in the construction work.

The following units of cost have been used in making the estimate of the cost of the execution of Plan No. 2:

COST OF TILE DRAINS PER LINEAL FOOT.

	SIZE OF TILE.							
	8-inch.	10-inch.	12-inch.	14-inch.	16-inch.	18-inch.	20-inch.	22-inch.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Cost of tile at Fresno--	13½	22½	27	40	50	60	70	85
Other costs-----	19¼	20¼	21¼	23¼	23¾	25¼	29½	33
Totals-----	32¾	42¾	48¼	63¼	73¾	85¼	99½	118

Cost of manholes, estimated at 1½ cents per lineal foot drain; sumps at pumping stations, \$90 each; pumping plants, \$1,200 for the smaller and \$1,600 for the larger subdistricts. To the total cost of construction 5 per cent is added to cover incidental expenses, such as organization, engineering, etc., which can not be itemized but which are a legitimate and necessary part of the cost of the completed work.

Under this plan the subdistricts are designed and estimated as units of the whole, and the cost per acre of the territory included in each does not in any way depend upon that of an adjoining subdistrict. Striking an average of the several subdistricts, the cost per acre is estimated at \$14.16. In this system all drains are of tile, and labor and material estimated at present quotations. While the cost varies somewhat for the different subdistricts, this may be regarded as a fairly accurate estimate under existing conditions of values. There will be approximately 60 miles of drains, making it a work of such magnitude that it will enlist the best efforts of contractors. Each of the separate subdistricts will require from 10,000 to 31,000 feet of draintile ranging from 8 to 22 inches in diameter. With respect to the estimates of the cost of both plans it should be said that a more minute canvass and examination of all the details will probably result in a reduction of the estimates. It is intended to present the case fairly, and to name figures that will cover the cost. In the consideration of new work for which there is no local price established the tendency is to underestimate rather than otherwise. A cost of from \$13 to \$14 an acre on all land included within the limits of a district containing from 17,000 to 20,000 acres may be regarded as an outside estimate with a reasonable prospect of the final cost being 20 per cent less.

COMPARISON OF THE TWO PLANS.

Plan No. 1 disposes of the water by gravity into a large intercepting outlet constructed for the purpose which will discharge the water into the flat leading into Fresno Slough. Plan No. 2 gathers water into sumps at convenient points by means of tile drains and discharges it by suitable pumps into existing irrigation canals. In both instances the lowering of the soil water is to be accomplished by parallel drains, one half mile apart and from 5 to 8 feet deep. In the former plan land will be taken up by open ditches, and they must be crossed by irrigation

canals, public and private roads, and railroads, and provision must be made for constant repairs and cleaning. In the latter plan no land need be provided nor bridges built and maintained, but ample provision must be made for scouring the drains and for operating the pumps. This expense where several subdistricts are operated under one management may be placed at 25 cents per acre annually. In Plan No. 1 the work should be organized and executed as a unit, and possesses the advantage that each drain may be extended farther east and be made available for an extension of territory at any time the people may so desire. In Plan No. 2 as many subdistricts may be formed into one district as desired and the work of each subdistrict be complete in itself. The difference in the cost of the work under the two plans as estimated is not enough to enter seriously into the discussion of the plans, but as far as cheapness is concerned the chances are in favor of the second.

THE EFFICIENCY OF THE TWO PLANS.

There seems to be no evidence to show that either open or closed drains will fail to lower water in seeped soils. Experience in Colorado with either kind of drains is satisfactory in that respect. Observations upon the water line made in March, 1903, for a distance of $3\frac{1}{2}$ miles along Fruit avenue, indicate that the rise is mainly uniform at different points, and that while these points do not form a straight line, they readily show that if drains were placed at the one half mile lines as directed in the plans described, the water line would lower between them with as great uniformity as it now rises when there is no drainage. It may be said in favor of the open-drain system that the ditches are made large, not because it is expected that the drainage to be provided for will require their full capacity, but for reasons of construction and maintenance. They can not be kept open unless they have sufficient bottom width to permit workmen to readily clean them, and further, ample bottom width will give room for some temporary obstructions caused by crumbling sides without wholly obstructing the ditch. For this reason there will be but slight risk of overcharging the capacity of the ditches. The capacity of the tile system will be limited to the amount of drainage which it is computed to carry, which is, as before stated, $2\frac{1}{2}$ cubic feet per second for each square mile.

The data thus far secured regarding the quantity of water which should be removed from the soil daily are not as complete and reliable as could be desired. The only definite measurements upon the rise of the water table were obtained in March, 1903, from test wells located half a mile apart along Fruit avenue, beginning at Church avenue and continuing south. The rise noted at the several wells at the end of thirty days was as follows:

	Inches.
Well No. 1	18
Well No. 2	13
Well No. 3	16
Well No. 4	11
Well No. 5	17 $\frac{3}{4}$
Well No. 6	18 $\frac{3}{4}$
Well No. 7	15

From this record it appears that the daily rise during the month of March was one half inch, which is greater than information previously

obtained had given reason to believe. Should this prove to be a fair criterion for computing the capacity of the drainage channels required, it may be found that the tile system will be overcharged. There are indications, however, that the water in some localities passes downward to lower levels through channels in the soil occurring at irregular intervals, so that drains which collect water from one locality may part with it at another before it reaches the final outlet.

USE OF DRAINAGE WATER.

The water which will be developed by any drainage system may be useful for irrigation whether delivered to a ditch provided especially for the purpose or mingled with the water in the irrigation canals. From the information thus far obtained it is believed that in this region such waters may be safely used for irrigation.

SUMMARY.

This is the case briefly stated. The attempt has been made to present the facts gathered in such a manner that the conclusions reached can be understood by all. The drainage of these lands is practicable, though not without difficulties. The worth of the product of the land, together with its value for homes, make it well worth the cost. The land which has suffered greatest injury is that which is regarded most highly for the cultivation of vines. The fertility of the soil is unquestioned. The use of expensive fertilizers will not be required. No serious disadvantage attends the cultivation of this vineyard soil except its lack of drainage. While this difficulty was unlooked for when the land was first improved, it is not one which may not be overcome, nor will the expense of the necessary work be greater than has been incurred for similar improvements elsewhere on land much less valuable and which is now considered by the owners a most profitable and satisfactory investment.

THE BENEFITS OF DRAINAGE.

By E. W. HILGARD.

Irrigation and drainage are, or should be, intimately connected except where the supply of irrigation water is exceptionally scanty. It is always difficult to utilize a desirably abundant water supply so as not to call for at least local application of artificial drainage.

In the valleys and plains of the arid irrigation countries the soils are predominantly of a light, sandy or silty nature, easily penetrated to great depths by water and air. With these the roots of plants also reach to such depths, drawing therefrom not only moisture but also plant food, which in these soils is, as a rule, very abundant. The plants of the arid region thus are enabled to utilize nearly as many feet of soil mass as in the regions of summer rains inches would be drawn upon; and it is evident that this advantage, which postpones for a long time the need of fertilization, should not be lightly thrown away. Each farm in the arid region has several similar ones underground, which with proper management can be fully utilized.

But this presupposes that the water, air, and roots can all penetrate under irrigated culture as they do in the natural condition. It means

that the ground-water level shall not be allowed to rise to such an extent as to prevent the penetration and healthy life of the roots in the depths of the soil mass. If by intentional or careless over-irrigation, or by leakage from the ditches, the water level is allowed to rise within a few feet of the surface, the wonderfully productive lands of the arid valleys are reduced to the same condition as are those of the humid countries: a shallow layer of surface soil, within which alone the roots can exercise their functions of plant nutrition. The natural result is that this layer soon becomes exhausted, and copious artificial fertilization is required to maintain profitable production.

And even this is the most favorable case. When, in addition, the upward movement of the soil water carries with it the entire mass of salts of various kinds which exist in all arid soils, and brings them within reach of surface evaporation, these "alkali" salts impregnate the soil to such extent as to render the cultivation of many crops unprofitable, or sometimes altogether impossible. This "rise of the alkali" has been experienced in all arid countries where irrigation is practiced, in Algeria, Egypt, and India, as well as the United States; it occurs wherever salt marshes are reclaimed from the saline overflow, as has been done for centuries in the Old World; and the means for such reclamation are well known and as a general method require no new demonstration. *Drainage*, and especially *underdrainage*, are the absolute and definite remedies for alkali, as well as for excessive rise of bottom water.

The principles and practice of drainage are well known, and not difficult to master by any intelligent person; but in the alkali regions it sometimes requires special additional precautions to render it effective. The chief obstacle found is where "black alkali" or carbonate of soda exists in a close-grained soil, puddling it and rendering it both impervious to water and impossible of tillage. In such cases the underdrains may not run until the noxious "black alkali" is at least partially neutralized by means of a dressing of gypsum, "land plaster." In the Fresno region this, fortunately, is the exception and not the rule.

Summarizing the advantages of systematic land draining which is now placed within the reach of the people of California by the Drainage Act recently passed, it may be said that

1. It prevents the drowning-out of the deeper roots of plants by the rise or fluctuations of the ground water, by which the vineyards and orchards are so frequently rendered unprofitable.

2. It prevents, or at least limits definitely, the shallowing of the soil caused by high-lying ground water, resulting in the need of early and copious fertilization, which would otherwise not have been called for in many years. The annual cost of such fertilization will soon exceed the first cost of drainage.

3. Drainage does away definitively with the alkali evil. When once established the land can easily be so handled as either to remove all the alkali, or to leave in the soil so much of it as may be rationally considered beneficial, on account of its usual content of valuable and highly available plant food. To prevent the waste of much of this soluble plant food, the use of gypsum is also valuable; but subsequent swamping of the land would cause a return of the black alkali unless drainage were provided for.

ANALYSES OF WATERS.

By GEORGE E. COLBY.

The waters grouped in their natural divisions comprise lake and stream, spring, common wells, artesian wells, and reservoirs and irrigation ditches.

"Another grouping has, for convenience, been made in the tables, viz., as to suitability or non-suitability for domestic or irrigation use. If a water containing as much as ten grains of alkali per gallon be used in sufficient amount to equal 20 inches of rainfall, or applied at the rate of about 7,000 gallons per tree in the orchard, it is calculated that the soil will receive about 800 pounds of alkali salts per acre. If this were either common salt or the carbonate of soda, then in three or four seasons there would be accumulated a sufficient amount to severely injure citrus and many deciduous orchard trees, as well as many smaller cultures. A larger amount of sulfates or glauber salt would be required before injury resulted, most of the cultures being able to tolerate as much as 20,000 pounds per acre in 4 feet depth.

"Whenever, then, a water is found to contain from 10 to 18 grains of carbonate of soda or common salt, or 75 to 100 grains of glauber salt per gallon, it is placed in the 'doubtful for permanent irrigation' list; while an amount higher than 18 grains places the water in the 'unsuitable for irrigation' group.

"In some cases there are high amounts of carbonate of soda which may be neutralized and changed to the sulfate in the soil by the application of gypsum to the land. These naturally belong to the doubtful group.

"For ordinary drinking use the presence of upward of 40 grains of soluble salts (sulfates, chlorid, and carbonate) per gallon is usually regarded as beyond the endurance of the systems of most persons. A subdivision of the 'suitable for irrigation' waters is therefore made, for the purpose of eliminating those which are unsuitable for domestic use."—(Report 1901.)

In accordance with the above classification the waters examined here, numbering 275 (during the period extending from July 1, 1901, to July 1, 1903), sent by persons to have ascertained their fitness for domestic and irrigation purposes only, have been found by analysis to be as given in the following tables. The summary just below states in a general way the character of the waters examined:

SOURCE.	Total Number of Waters Examined	Suitable for Use as above stated	Of Doubtful Use	Not Suitable for Domestic or Irrigation Purposes
Lakes and streams	19	15	2	2
Springs	70	41	12	17
Common wells	153	101	10	42
Artesian wells	19	14	2	3
Reservoirs and irrigation ditches	14	14		
Totals	275	185	26	64

By making a comparison of this statement with that for the summary of waters examined from June, 1898, to 1901 (310 in number, and reported at pages 215-230, California Station Report, 1898-1901), it appears that the recent one shows a much larger percentage of acceptable or suitable waters, viz.: 67 as against only 42 per cent for the earlier waters. It is also worth noting that in the last series among the artesian waters there appeared but one tenth poor-grade ones, while the earlier series (1898-1901) upon the same number examined showed that nearly one third were worthless for the purposes under consideration. And all of the reservoir and ditch waters of the last series were found to be pure enough for use, which is quite contrary to the finding for the earlier series, where nearly one half were condemned.

STREAM AND LAKE WATERS.

Of the nineteen samples of waters from lakes and streams which were received and analyzed, only two were reported to be unfit for use, thus leaving seventeen very good waters. The purest one was taken from Brandy Creek, Shasta County, and showed the remarkably small quantity of solids, 3.2 grains per gallon, which is not uncommon for "melted snow" water. Lee's Lake, in Riverside County, holds a place already established for it by earlier work, among the waters not suitable for irrigation purposes; especially is it poor for citrus fruit orchards. (See table on page 68.)

SPRING WATERS.

"The waters of springs have usually not volume sufficient to be used for irrigation purposes, hence their examination is chiefly with regard to their fitness for domestic purposes."

Seventy samples are reported upon under this heading, and nearly 60 per cent of these are found to be worthless for drinking and irrigation purposes. This is quite identical with what was determined about this group during the 1898-1901 period.

Hardly a water in this group of unsuitable ones would be worth treating by the usual processes of boiling or adding *sal soda* to improve it for boiler use; but many of those fit for domestic and irrigation purposes might be thus softened. (See table on pages 69-71.)

LAKE AND STREAM WATERS.

Locality.	County.	Sender.	Taken From.	Grains per gallon					
				Total Salts..	Glauber Salt	Common Salt	Sal Soda	Lime Carbonate and Gypsum	Silica
									Chemically Combined Water and Organic Matter
SUITABLE FOR IRRIGATION AND DOMESTIC USE.									
Riverside	Riverside	Chase Nursery Co.	Open canal	16.89	1.93	.33	1.23	12.24	1.16
Jackson	Amador	J. H. Barber	Ditch	6.40		1.74		3.79	.87
Brandy Creek	Shasta	I. J. Muma	Creek	3.20		.29		.29	.58
Oakley	Contra Costa	W. G. Grove	Slough	6.70	.13	.17	1.45	3.20	1.75
Paso Robles	San Luis Obispo	S. D. Merk	River	14.27	1.70	1.35	.74	7.45	2.04
San Miguel	San Luis Obispo	A. F. Benton	River	14.28					
Placerville	El Dorado	A. Tevis	Fallen Leaf Lake	5.23		1.16		2.33	1.74
Lodoga	Colusa	W. W. Mackie	Little Stony Creek	15.74	3.34	.33	.99	9.33	1.74
Lodoga	Colusa	W. W. Mackie	Stony Creek	16.31	7.73	.64	.37	5.83	1.74
Grindstone Creek	Glenn	W. W. Mackie	Mouth of Creek	17.48	2.74	.33	1.24	11.37	1.80
Briscot Creek	Glenn	W. W. Mackie	Creek	25.36	.76	.33	1.24	17.20	5.83
Kings River	Kings	K. B. Duncan	Near Church Canal	4.01	.91	.23	.03	1.27	.93
Lytle Creek	San Bernardino	Dr. W. Thompson	Campbell Weir	11.07	1.95	.33	1.22	5.24	2.33
Truckee River	Nevada	P. E. Harroun	Tributary	6.45		1.22		3.01	2.22
Los Angeles	Los Angeles	Mrs. E. Pauly	City hydrant	27.98	6.83	.69	1.22	15.16	4.08
(OF DOUBTFUL USE.									
Imperial	San Diego	Rev. F. H. Wales	Ditch	53.06	13.64	16.91	1.23	19.24	2.04
Courtland	Sacramento	W. Gammon	Lake	51.01	4.32	9.44	3.73	27.69	5.83
NOT SUITABLE FOR IRRIGATION.									
Riverside	Riverside	W. Irving	Lee's Lake	62.84	15.08	18.24	.96	13.60	1.74
Corona	Riverside	S. W. Lockett	Lee's Lake	58.32	6.10	20.96	.93	24.49	5.83

SPRING WATERS.

Locality.	County.	Sender.	Grains per Gallon.						
			Total Salts.	Glauber Salt.	Common Salt.	Sal Soda.	Lime Carbonate and Gypsum.	Silica.	Chemically Combined Water and Organic Matter.
SUITABLE FOR DOMESTIC USE.									
Foothills.									
East slope	Sierra.	R. T. Rochford	8.76	1.21	17	.37	3.51	2.34	1.16
Gregory	Shasta	L. C. Nilsson	40.57	1.87	22.97	3.44	8.74		3.55
Coast Range.									
Lakeport.	Lake	R. S. Rodman	8.87	1.03	trace	.49	4.32		3.03
St. Helena	Napa	A. J. Sanderson	10.49	1.08	.23	.61	6.82		1.75
Napa.	Napa	W. Renwick	14.27		2.91		10.49		.80
Napa.	Napa	W. Renwick	14.86		3.38		10.49		.99
Petaluma	Sonoma	E. H. Puckett	14.69	.56	.68	.10	11.66		1.66
Glen Ellen	Sonoma	W. A. Thompson	14.86	.23	1.69	.70	9.33		2.91
Glen Ellen	Sonoma	W. A. Thompson	13.40	.14	1.02	1.63	7.58		3.03
Glen Ellen	Sonoma	W. A. Thompson	15.16	.69	.33	1.02	11.08		2.04
Danville	Contra Costa	R. W. Graham	11.66	.48	1.34	1.22	3.38		5.24
Los Gatos	Santa Clara	H. Peterson	16.91		3.79		11.66		1.46
Los Gatos	Santa Clara	Gen. J. C. Strong	17.19		6.41		8.16		2.62
Los Gatos	Santa Clara	H. G. Osburn	26.82	4.82	.68	.62	18.66		2.04
Glenwood	Santa Cruz	Mrs. B. A. McLaughlin	20.69		.583		11.37		3.49
Glenwood	Santa Cruz	Mrs. B. A. McLaughlin	29.16		8.05		16.91		4.19
Boulder Creek	Santa Cruz	J. S. Smith	8.73		2.33		4.06		1.74
Hollister	San Benito	R. Roca	36.73	9.12	2.53	2.34	18.66		4.08
Salinas	Monterey	D. G. McLean	35.37	.60	5.11	.99	18.74		9.93
Paso Robles	San Luis Obispo	J. L. Barker	36.14	4.51	3.38	1.73	21.61		4.91
Santa Barbara	Santa Barbara	Geo. M. Williams	32.06	3.57	1.03	1.23	20.99		5.24
Ventura	Ventura	J. Roth	37.32	12.01	.67	.62	21.57		2.45
Southern California.									
Kern River Cañon	Kern	C. N. Beal	16.33	5.84	3.38	1.86	4.08		1.17
Vallevista	Riverside	A. Saunders	33.53	4.49	.64	6.53	16.91		4.96
San Jacinto	Riverside	W. R. Morehouse	16.64	2.84	1.69	2.48	6.42		3.21
San Jacinto	Riverside	W. R. Morehouse	21.25	7.98	.68	1.73	10.10		.76

SPRING WATERS—CONTINUED.

Locality.	County.	Sender.	Grains per Gallon.					
			Total Salts...	Glauber Salt	Common Salt	Sal Soda	Lime Carbonate and Gypsum...	Silica .....	Chemically Combined Water and Organic Matter .....
SUITABLE FOR DOMESTIC USE—Continued.								
Dehesa.....	San Diego.....	K. H. Schmid.....	36.72	9.22	10.78	.99	13.99	1.74
Dehesa.....	San Diego.....	K. H. Schmid.....	32.06	4.97	7.45	.99	15.74	2.91
SUITABLE FOR IRRIGATION PURPOSES.								
Coast Range.								
Cloverdale.....	Sonoma.....	Messrs. Hotle.....	47.16	7.85	.33	.91	31.14	6.93
Cloverdale.....	Sonoma.....	Messrs. Hotle.....	62.68	7.83	.33	2.16	44.49	7.87
Cloverdale.....	Sonoma.....	Messrs. Hotle.....	71.13	8.00	.33	2.16	50.26	10.38
Cloverdale.....	Sonoma.....	Messrs. Hotle.....	54.81	10.10	.33	1.23	38.49	4.66
Cloverdale.....	Sonoma.....	Messrs. Hotle.....	44.31	8.33	.33	.62	31.49	3.49
Cloverdale.....	Sonoma.....	Messrs. Hotle.....	68.22	5.28	.33	3.72	50.15	8.74
Cloverdale.....	Sonoma.....	C. Creon.....	49.57	4.09	3.50	4.89	40.82	5.25
Echo Station.....	Mendocino.....	F. Roseman.....	60.34	14.83	2.68	1.73	41.69	6.99
Mulberry.....	San Benito.....	C. Daveggio.....	42.56		2.68		16.91	6.41
Southern California.								
Bakersfield.....	Kern.....	W. S. Tevis.....	87.36	15.41	1.15	.93	50.82	15.19
Garvanza.....	Los Angeles.....	J. F. Pattison.....	68.40	8.12	6.06	1.12	39.14	10.40
Cactus Valley.....	Riverside.....	Albert Levy.....	54.73	trace	6.82	1.24	37.79	8.88
El Cajon.....	San Diego.....	J. S. Scott.....	42.55	7.06	8.45	2.56	20.11	4.37
NOT SUITABLE FOR DOMESTIC OR IRRIGATION USES.								
Foothills.								
Valley Springs.....	Calaveras.....	C. Saracco.....	166.76	53.70	43.36	1.48	49.30	18.92
Valley Springs.....	Calaveras.....	H. Coleman.....	308.48	92.59	189.40	6.18	12.82	7.46

<i>Great Valley.</i>		M. Wallrath.....	348.15	4.92	135.29	93.06	79.89	34.99
Colusa.....		Mrs. S. Roberts.....	93.30	5.84	47.35	18.54	15.74	5.83
<i>Coast Range.</i>								
Middletown.....		Rev. William Brennan.....	190.68		61.23		85.72	
Witter.....		D. W. Hobson.....	650.80		358.06		141.12	151.62
Cazadero.....		W. G. Chamberlain.....	367.86		76.39		288.09	23.32
Shandon.....		A. McMillan.....	180.36	16.63	8.76	.85	100.10	20.99
Paso Robles.....		J. H. Horsburgh, Jr.	146.39	4.07	88.63	1.22	37.32	6.99
<i>Southern California.</i>								
Surf.....		G. T. Olson.....	84.53	16.04	20.29	2.44	38.77	6.99
Mescaliton Islands.....		F. H. Rowe.....	331.1		302.0		16.9	12.20
Piru City.....		R. F. Holser.....	357.18	67.55	1.69	.74	231.80	55.40
Ventura.....		Mary Owens.....	157.12	29.37	1.79	2.01	94.04	5.26
Palos Verdes Rancho.....		G. H. Stewart.....	545.27	101.49	25.97	3.09	382.30	26.29
Covina.....		O. Youngs.....	134.99		116.05		14.57	4.37
Santa Ana.....		Geo. Opp.....	112.06		19.24		84.55	
San Diego.....		W. S. Waterman.....	103.38	28.69	27.28	1.85	36.79	2.05

DOUBTFUL FOR IRRIGATION; UNSUITABLE FOR DOMESTIC USE.

<i>Foothills.</i>		J. H. Moore.....	60.04	25.15	3.38	.62	25.65	5.24
Lancha Plana.....								
<i>Great Valley.</i>		S. R. Gurney.....	103.79		40.82		51.31	11.66
Klepstein Springs.....								
<i>Coast Range.</i>								
Lower Lake.....		H. Kunisch.....	40.80	18.74	.33	.75	16.32	4.66
Los Gatos.....		Gen. J. C. Strong.....	61.23		15.16		37.91	8.16
Mountain View.....		M. McKenzie.....	46.65	5.62	5.42	.62	26.83	8.16
Salinas.....		D. G. McLean.....	64.52	12.04	4.78	.52	31.42	11.97
<i>Southern California.</i>								
Mescaliton Islands.....		F. H. Rowe.....	41.39	10.22	.69	.75	26.82	2.91
Mescaliton Islands.....		F. H. Rowe.....	51.88	14.86	.99	.47	32.65	2.91
Northern part.....		T. B. Bishop.....	125.08	55.36	5.77	1.86	47.82	14.28
Santa Barbara.....		E. Cooper.....	93.00	8.36	4.08	2.56	65.00	13.00
Santa Monica.....		Experiment Station.....	63.10	32.25	3.38	1.11	10.03	8.16
Poway.....		L. N. Hilleary.....	45.80	1.41	18.95	2.09	18.15	5.30

COMMON WELL WATERS.

The number of waters from ordinary wells that have been sent for examination reach 153 and come from almost every part of the State. In the accompanying tables they are grouped according to suitability for domestic or irrigation uses, and also with regard to the several agricultural regions. There are also quite a number which, while suitable for irrigation, contain too much of glauber salt, etc., for domestic use; these are placed in a group to themselves.

Water Suitable for Any Use.—Quite a number of very pure waters containing less than ten grains of *mineral matter* were found in the different counties, as follows: Sacramento, Sonoma, Alameda, San Mateo, Santa Clara, Kings, Kern, and Los Angeles. This, however, is not remarkable, excepting, perhaps, those from the Santa Clara Valley, which mostly furnishes "hard" waters.

Waters Suitable for Irrigation, but Unsuitable for Domestic Use.—These amount to sixteen in number. The glauber-salt content does not injure them for irrigation, but renders them purgative for constant drinking by most persons. Ten waters were classed as of doubtful purity for irrigation, and this because of their large content of common salt, or perhaps sal soda.

Unsuitable for Use.—Forty-two common well waters examined are found to be too heavily loaded with minerals to be fit for any use—one has twenty-five times more than is tolerable. One water from Oakland shows 171.8 grains of common salt, which it undoubtedly takes from seepage of bay water into the well. Common salt in excess is in the main the ingredient which throws all these waters out of use.

COMMON WELL WATERS.
SUITABLE FOR DOMESTIC AND IRRIGATION USES.

Locality.	County.	Sender.	Depth, in Feet	Grains per Gallon.							
				Total Salts.	Glauber Salt.	Common Salt.	Sal Soda	Lime Carbonate and Sulfate	Silica	Chemically Combined Water and Organic Matter	
<i>Foothill Region.</i>											
Colfax	Placer	Mrs. M. E. Watts		17.48	1.56	.34	.43	10.49		4.66	
<i>Sacramento Valley.</i>											
Tancred	Yolo	C. T. Greathhead		32.06		4.95		21.28		5.83	
Colusa	Colusa	J. Boedefeld	30	15.15	1.13	.33	1.45	9.91		2.33	
Nicolaus	Sutter	H. L. Hansen	45	11.65		2.33		7.58		1.74	
Sacramento	Sacramento	G. W. Peltier	117	19.55		4.08		10.49		4.96	
Sacramento	Sacramento	California Winery		15.45	3.97	.92		7.58		1.46	
Sacramento	Sacramento	J. E. Smith	70	8.74		2.33		4.08		8.74	
<i>San Joaquin Valley.</i>											
Clements	San Joaquin	L. Friedberger	80	17.48	5.02	.67	.43	8.74		2.62	
Dos Palos	Merced	T. Korslad		22.74	7.06	1.69	.87	11.08		2.04	
Fowler	Fresno	W. E. Price		22.14	.26	.33	5.24	12.82		3.49	
Hanford	Kings	N. W. Motheral	40	9.93	.65	.16	1.24	5.54	1.46	.88	
Hanford	Kings	C. M. Blowers	66	8.16	.80	.33	.62	5.54		.87	
Dinuba	Tulare	K. A. Linder		12.26	1.33	.68	.62	3.79	4.68	1.16	
Porterville	Tulare	J. H. Williams		28.56	9.18	2.37	4.19	7.58		5.24	
Delano	Kern	B. Thomas		20.65	3.81	2.26	.99	8.99	1.98	2.62	
Kern	Kern	J. M. Thompson	70	10.48		7.58		1.74		1.16	
Kern	Kern	J. M. Thompson		12.23		5.24		2.91		4.08	
Armona	Kings	S. T. Owings	30	11.85	.46	.68	.49	9.46		.76	
<i>Coast Range.</i>											
Eureka	Humboldt	C. S. Milnes		19.23	1.28	.34	2.46	13.41		1.74	
Vacaville	Solano	C. H. Parker		33.86	.66	9.32	4.79	6.54	1.05	12.10	
Eastland	Marin	F. B. Turpin	46	13.11	.46	3.38	.24	6.99		2.04	
Santa Rosa	Sonoma	E. W. Davis	31	27.68	5.40	.68	.62	17.49		3.49	
Eldridge	Sonoma	R. P. Hill		14.33	3.33	4.01	1.23	4.18		1.58	

COMMON WELL WATERS—CONTINUED.
SUITABLE FOR DOMESTIC AND IRRIGATION USES—Continued.

Locality.	County.	Sender.	Depth, in Feet....	Grains per Gallon.					
				Total Salts..	Glauber Salt.....	Common Salt.....	Sal Soda.....	Lime Carbonate and Sulfate.....	Silica.....
<i>Coast Range—Continued.</i>									
Forestville.....	Sonoma.....	Wm. Lehn.....	---	8.21	1.88	.34	1.22	3.55	1.22
Santa Rosa.....	Sonoma.....	A. M. Frei.....	75	13.39	1.60	.67	1.22	8.16	1.74
Sebastopol.....	Sonoma.....	G. W. Kingbury.....	69	4.65	---	1.16	---	2.91	.58
Ignacio Valley.....	Contra Costa.....	M. L. Whitman.....	50	29.76	5.55	2.04	1.74	17.51	2.92
San Mateo.....	San Mateo.....	H. R. Verrue.....	190	27.69	2.51	6.76	1.22	11.66	5.54
San Mateo.....	San Mateo.....	H. R. Verrue.....	65	7.86	1.83	.33	.75	2.04	2.91
Oakland.....	Alameda.....	S. A. Norman.....	16	49.56	11.39	13.52	2.50	12.53	9.62
Oakland.....	Alameda.....	J. Hampton.....	---	46.65	.98	12.16	4.94	18.66	9.91
Oakland.....	Alameda.....	Mrs. L. Rawlings.....	---	12.82	---	4.37	---	6.41	2.04
Oakland.....	Alameda.....	P. A. Cameron.....	227	38.48	12.74	10.14	1.03	9.33	5.24
Oakland.....	Alameda.....	Mrs. G. W. Bunnell.....	30	29.10	6.38	2.03	.62	14.28	5.83
Oakland.....	Alameda.....	W. Cron.....	65	30.32	9.87	4.72	1.45	12.24	2.04
Oakland.....	Alameda.....	Mrs. M. Scott.....	144	36.57	3.86	6.76	1.63	18.66	5.66
Oakland.....	Alameda.....	H. C. McPike.....	79	33.32	1.81	3.73	.87	15.74	2.91
Oakland.....	Alameda.....	J. Davis.....	55	34.98	6.29	.67	.62	16.33	3.49
North Oakland.....	Alameda.....	H. A. Burns.....	---	27.10	6.16	1.35	1.23	14.57	7.58
Berkeley.....	Alameda.....	Mrs. R. M. Shattuck.....	---	27.98	6.10	1.01	.47	18.07	3.79
North Berkeley.....	Alameda.....	S. H. Reno.....	---	25.65	4.20	8.45	.17	14.86	2.33
Alameda.....	Alameda.....	Mrs. A. J. Thompson.....	170	13.39	.66	3.38	.62	6.99	1.74
Livermore.....	Alameda.....	C. A. Buckley.....	400	20.40	5.15	1.39	4.54	8.74	.58
Decoto.....	Alameda.....	A. H. Bush.....	84	24.19	3.79	1.39	1.23	15.74	2.04
Elmhurst.....	Alameda.....	Mrs. E. N. Moore.....	20	29.14	6.24	2.04	.46	15.16	5.24
San José.....	Santa Clara.....	F. J. Decker.....	167	36.14	10.20	6.76	4.32	11.66	3.20
Evergreen.....	Santa Clara.....	E. G. Geisel.....	96	36.16	10.91	4.37	2.21	15.75	2.92
Mountain View.....	Santa Clara.....	R. C. Kirkwood.....	---	20.68	---	4.08	---	11.13	1.98
Campbell.....	Santa Clara.....	A. B. Smith.....	---	13.40	3.04	1.34	1.45	4.66	2.91
Los Gatos.....	Santa Clara.....	G. Giampoli.....	---	18.94	3.84	.17	1.23	11.08	2.62
Los Gatos.....	Santa Clara.....	G. Giampoli.....	---	16.31	3.80	.17	1.86	6.99	3.49
Mountain View.....	Santa Clara.....	W. W. Mackie.....	20	35.80	3.40	3.55	.93	15.89	11.68

San Juan	San Benito	E. H. Marbut	27.90	4.03	.69	1.98	13.11	3.09
Hollister	San Benito	H. Pond	25.06	5.13	2.68	1.22	13.70	2.33
Paso Robles	San Luis Obispo	R. L. Janney	37.30	3.67	6.76	1.23	13.61	5.24
Paso Robles	San Luis Obispo	W. H. Tuley	31.29	12.57	10.14	.62	3.61	3.79
Paso Robles	San Luis Obispo	W. M. Shutt	31.21	10.57	1.35	.62	8.37	2.92
Paso Robles	San Luis Obispo	S. D. Merk	18.64	.33	.33	1.23	10.20	4.08
Paso Robles	San Luis Obispo	A. F. Benton	23.02	4.92	1.51	1.73	12.24	2.62
San Miguel	San Luis Obispo	A. F. Benton	21.86	.36	1.69	1.22	14.68	3.91
<i>Southern California.</i>								
Northern Santa Barbara	Santa Barbara	T. B. Bishop	25.94	8.63	2.39	.64	11.66	2.62
Ocean Park	Los Angeles	Kinney & Dudley	40.80	2.18	11.19	.62	7.58	6.41
Ocean Park	Los Angeles	Kinney & Dudley	36.13	3.38	10.74	.74	6.41	4.66
Santa Monica	Los Angeles	Experiment Station	19.81	4.88	1.35	1.35	2.96	3.49
Santa Monica	Los Angeles	Experiment Station	36.73	13.93	8.75	.35	8.57	2.62
Lancaster	Los Angeles	M. R. Lyle	12.81	3.75	.26	1.23	5.83	1.74
Lancaster	Los Angeles	M. R. Lyle	300	6.46	.50	.62	13.41	1.74
Lancaster	Los Angeles	A. C. Weeks	294	.73	1.02	trace	5.84	1.75
Alhambra	Los Angeles	Dr. C. E. Ander	11.65	3.21	.99	.63	4.66	1.16
Lancaster	Los Angeles	W. W. Bliss	21.27	.93	3.38	.64	13.99	2.33
Duarte	Los Angeles	F. K. Simonds	12.81	4.37	4.37		6.99	1.45
Los Angeles	Los Angeles	C. H. Howland	33.23	7.74	6.77	5.70	10.34	2.68
Ingewood	Riverside	G. W. Vankirk	18.66	2.46	2.70	1.25	9.62	2.91
Corona	Riverside	G. W. Vankirk	18.66	2.46	2.70	1.25	9.33	2.92
Corona	Riverside	G. W. Vankirk	10.51	2.48	.14	1.24	4.09	.23
Indio	Riverside	Land and Water Co.	20	2.48	.14	2.24	3.98	.23
Indio	Riverside	Land and Water Co.	120	10.40	2.48		4.03	.58
Riverside	Riverside	E. O. Stansell	350	18.69	2.03	1.73	4.55	1.63
Riverside	Riverside	E. O. Stansell	300	16.11	5.46	3.46	4.55	1.17
Riverside	Riverside	Land and Water Co.	25	14.95	2.20	3.10	8.16	3.86
Coachella	Orange	G. I. Merritt	19.82	3.04	1.69	1.10	11.08	2.91
Anaheim	San Diego	E. I. Gray	13	14.00	2.22	.33	8.16	2.92
San Diego	San Diego	A. Beller	53	55.97	8.01	21.97	16.33	8.74
San Diego	San Diego	F. W. Bradley	30	26.83	6.20	4.72	16.33	5.83
San Diego	San Diego	J. E. Durfee	62	38.77	3.40	1.63	8.45	4.37
San Diego	San Diego	J. M. Williamson	4	18.95	4.79	1.45	6.12	3.21
Smith Mountain	San Diego	G. B. Grow	40	25.52	2.39	1.34	11.08	1.45
Alpine Valley	San Diego	G. B. Grow	40	25.52	2.39	1.34	11.08	1.45

NOT SUITABLE FOR EITHER DOMESTIC OR IRRIGATION USE.

Great Valley.

Fruto	Glenn	E. J. Jenkins	50	69.97	61.23	5.83	2.91
Fruto	Glenn	E. J. Jenkins	1100	1001.60	959.33	4.37	37.90
Roseville	Placer	H. G. O. Thorns		102.05	53.07	40.24	8.74

COMMON WELL WATERS—CONTINUED.
NOT SUITABLE FOR EITHER DOMESTIC OR IRRIGATION USE—Continued.

Locality.	County.	Sender.	Depth, in Feet	Grains per Gallon.						Chemically Combined Water and Organic Matter
				Total Salts.	Glauber Salt	Common Salt	Sal Soda	Lime Carbonate and Sulfate	Silica	
Great Valley—Continued.										
Courtland	Sacramento.	W. Gammon.	---	74.04	5.62	44.77	2.09	14.57		6.99
Oakley	Contra Costa	W. G. Grove	170	202.92	1.77	90.96	1.73	82.22		26.24
Stockton	San Joaquin	T. B. Bishop	79	89.65	4.48	27.28	14.85	29.61		13.43
Grayson	Stanislaus	Mrs. J. F. Ecker	---	539.00		407.05		96.22		36.16
Newman	Stanislaus	A. Barbour	100	109.92		43.96	2.44	32.94		13.41
Tulare	Tulare	W. H. Wilbur	360	233.93	24.17	86.04	31.20	73.31		19.21
Tulare	Tulare	W. H. Wilbur	1100	241.82	40.56	78.77	27.86	58.42	3.50	32.71
Hanford	Kings	Jas. A. Hill	110	174.93	78.49	57.50	5.42	25.65		7.87
Kern.	Kern	J. M. Thompson	---	162.99		53.95		97.38		11.66
Rosedale	Kern	L. S. Harman	---	81.63	16.67	4.73	3.09	53.65		3.49
Coast Range.										
San Mateo	San Mateo	A. C. Potter	---	49.56	7.99	16.91	8.92	11.08		4.66
Oakland	Alameda	W. A. Book	---	326.85		272.33		23.62		30.90
Oakland	Alameda	S. L. Potter	140	45.19	.82	23.21	2.21	13.12		5.83
Oakland	Alameda	L. Berovich	143	265.34	18.79	171.80	1.86	36.74		36.15
Oakland	Alameda	R. A. Whittaker	46	75.21		32.07		21.57		21.57
Santa Rosa	Sonoma.	Mrs. L. L. Shudy	---	146.36		83.38		27.41		35.57
Petaluma	Sonoma.	A. W. Foster	175	54.49	6.98	30.43	1.24	12.35		3.49
Petaluma	Sonoma.	H. C. Whiting	---	62.09	8.64	27.05	2.21	8.74	5.83	9.62
San Juan	San Benito.	E. H. Marbut	---	61.81	2.46	12.82	1.63	35.57		9.33
San Juan	San Benito.	E. H. Marbut	---	68.23	19.43	6.76	1.22	33.24		7.58
Moss Landing	Monterey	Vierra Bros	80	104.04		54.48		20.99		28.57
Lompoc.	Santa Barbara.	D. T. Bateman	25	115.45	29.86	16.91	1.63	56.56		10.49
Southern California.										
Montalvo	Ventura	Mrs. A. A. Moore	171	227.42	54.12	16.91	.70	141.12		14.57
Lancaster	Los Angeles	M. R. Lyle	4	88.05	19.33	52.07	5.58	8.74		2.33
Los Angeles	Los Angeles	J. Baruch	50	91.55	19.20	14.57	1.22	45.48		11.08
Winchester	Riverside.	C. S. Cook	55	295.07		122.47		154.53		18.07
Fullerton	Orange	F. H. Bryan	---	243.16	3.13	82.86	37.63	14.88		4.66

Anaheim	Orange	C. Dussourt	159.77	134.13	12.82	12.82
Sunnyvale	San Diego	L. A. Lobinger	138.20	52.07	92	27.99
Neslor	San Diego	Mrs. A. Hetherington	20	28.16	19.53	6.41
Chula Vista	San Diego	S. W. Haines	91.84	11.74	14.44	6.76
Bostonia	San Diego	C. O. Nichols	40	14.55	15.74	7.58
Bostonia	San Diego	C. O. Nichols	58.31	30.32	2.97	9.33
Bostonia	San Diego	C. O. Nichols	62.98	3.90	1.47	8.74
Bostonia	San Diego	C. O. Nichols	64.14	30.79	2.45	9.91
Bostonia	San Diego	C. O. Nichols	53.13	23.67	3.09	2.04
Chula Vista	San Diego	Mary E. Cook	210	4.92	8.16	1.16
San Diego	San Diego	Z. C. Mathes	40.81	23.01	2.72	11.09
National City	San Diego	W. F. Burlingame	40.59	20.46	1.22	15.16
			69.98	33.82		

UNSUITABLE FOR DOMESTIC, BUT SUITABLE FOR IRRIGATION PURPOSES.

Petaluma	Sonoma	A. W. Foster	24.18	9.50	1.57	5.54	5.24	2.33
Sebastopol	Sonoma	C. Gloeckner	26.58	2.11	2.68	1.04	11.66	9.09
Oakland	Alameda	L. Hewlett	72.30	19.62	11.83	.62	30.90	9.33
	Alameda	Oakland Enquirer	62.97	7.48	5.77	1.86	25.65	20.99
Rio Vista	Solano	E. M. Chase	41.68	8.65	6.76	.62	11.08	14.57
Coalinga	Fresno	J. Fried	45.26	13.91	1.70	.74	23.54	5.57
Hanford	Kings	Jas. A. Hill	65.31	43.69	1.69	.244	11.66	5.83
Sites	Colusa	F. S. Pryor	40.28	10.03	2.73	1.24	19.86	6.42
Sites	Colusa	F. S. Pryor	49.91	15.75	3.38	11.08	13.58	6.12
Fillmore	Ventura	J. Overton	61	91.50	2.03	.44	65.31	8.70
Santa Paula	Ventura	G. F. Novak	68	57.00	21.31	.34	27.24	7.07
Santa Monica	Los Angeles	Experiment Station	47.22	19.82	4.05	.62	11.96	4.67
Paradise Valley	San Diego	G. B. Grow	130	41.98	17.78	5.90	3.20	5.54
San Diego	San Diego	H. P. Wood	600	39.93	21.00	2.09	10.20	2.91

OF DOUBTFUL SUITABILITY FOR IRRIGATION USE.

Oakland	Alameda	Geo. W. Dornin	42.56	67	12.12	.62	18.07	11.08
Oakland	Alameda	J. F. Kennedy	52.48	8.93	7.75	4.90	24.49	6.41
San José	Santa Clara	A. Davis	53.64	15.25	9.20	.62	20.41	8.16
San Juan	San Benito	E. H. Marbut	73.47	20.99	40.82		40.82	11.06
Moss Landing	Monterey	E. C. Vierra	39.06	20.75	3.38	1.23	11.08	2.62
Armona	Kings	Mrs. C. W. Sullivan	30.56	.84	.34	17.31	6.90	4.37
Lemoore	Kings	R. D. Vandeburg	29.15	5.98	.33	12.35	5.83	4.66
Santa Monica	Los Angeles	Experiment Station	164	32.68	2.71	.47	13.07	6.88
Santa Monica	Los Angeles	Experiment Station	72.31	34.65	4.05	.70	11.27	9.33
La Mesa	San Diego	D. B. Williams	36.15	3.55	16.21	1.23	12.24	2.92

WATERS OF ARTESIAN WELLS.

There were nineteen waters of artesian wells received, and of these fourteen were found to be suitable for both domestic and irrigation uses. Two very poor waters, from their large content of common and glauber salts, were received from Bay Island Farm and Stockton, and this is not uncommonly the case for these localities.

WATERS OF RESERVOIRS AND IRRIGATION DITCHES.

Of the fourteen reservoir waters, all were found to contain so little mineral matter as to be fit for use, except that several were so highly charged with lime carbonate as to be "hard" in character. (See table on page 80.)

SANITARY EXAMINATIONS.

The waters for which a sanitary examination was requested to ascertain whether or not they were contaminated and unfit for domestic use were five, and chiefly from ordinary wells. They were all but one found to be fit for use; the sample unfit for use came from waters furnished to the U. S. ship "Thetis" off Sausalito, Marin County, Cal. The water contained very much vegetable matter, which was undoubtedly fermenting, or in the first stages of putrefaction. (See table on page 81.)

WATERS FROM ARTESIAN WELLS.

Locality.	County.	Sender.	Depth, in Feet	Grains per Gallon.						
				Total Salts.	Glauber Salt.	Common Salt.	Sal Soda	Lime Carbonate and Gypsum.	Silica	Chemically Combined Water and Organic Matter
SUITABLE FOR DOMESTIC AND IRRIGATION USES.										
Lancaster	Los Angeles	M. R. Lyle	190	902	1.93	.33	1.23	4.37	4.37	1.16
Riverside	Riverside	F. Cuttle	642	2215		7.35		13.41	13.41	1.39
Indio	Indio	A. Sarbaugh	337	13.11		2.33		9.33	9.33	1.45
Moss Landing	Monterey	E. C. Vierra	40	29.73	3.96	4.73	2.97	13.99	13.99	4.08
Buenapark	Orange	G. H. Stewart		21.57	4.67	2.04	1.74	11.66	11.66	1.46
Riverside	Riverside	F. A. Cuttle		14.84	5.44	1.40	3.70	2.56	2.56	1.74
Madera	Madera	E. C. Foster		10.49	2.34	.33	.62	4.08	4.08	2.62
San Bernardino	San Bernardino	S. Marshall	607	11.66	1.13	.33	1.46	7.58	7.58	1.16
San Bernardino	San Bernardino	Parker Iron Works		15.73	1.12	.33	1.46	7.58	7.58	5.24
Coachella	Riverside	Land and Water Co.	500	9.34	3.69	.14	2.48	1.75	.58	.70
Riverside	Riverside	Riverside Trust Co.	554	17.01	4.80	.68	1.22	6.53	2.21	1.57
Riverside	Riverside	Riverside Trust Co.		27.63	7.87	1.00	2.44	11.66	2.33	2.33
Riverside	Riverside	Riverside Trust Co.	600	13.98	2.18	.33	1.86	5.83	2.33	1.74
Riverside	Riverside	Riverside Trust Co.		16.90	3.06	.67	.82	8.16	2.33	1.86
Armona	Kings	S. T. Owings	550	16.88	5.57	1.36	1.25	5.37		3.33
DOUBTFUL FOR IRRIGATION USE.										
San Diego	San Diego	G. P. Hall		54.23	4.89	18.91	1.86	22.45	2.04	4.08
West Saticoy	Ventura	Saticoy Development Co.		48.69	18.45	1.34	.62	23.33	2.91	2.04
NOT SUITABLE FOR DOMESTIC USE.										
Bay Island Farm, nr Alameda	Alameda	Miss V. Cleveland	183	197.69		133.53		22.74		40.82
Stockton	San Joaquin	A. K. Percival	2000	280.37		233.82		15.07		31.48
Turlock	Stanislaus	N. O. Hultberg		59.27	17.55	3.05	7.43	28.33	.87	2.04

WATERS FROM RESERVOIRS AND IRRIGATION DITCHES.

Locality.	County.	Sender.	Taken from	Grains per Gallon.						
				Total Salts..	Glauber Salt	Common Salt	Sal Soda	Lime Car- bonate, CaSO ₄	Silica	Chemically Combined Water and Organic Matter
SUITABLE FOR IRRIGATION.										
San Mateo	San Mateo	H. R. Verrue.....	Creek	14.56	2.88	.67	.99	8.16	8.16	1.86
Fresno	Fresno	O. V. P. Stout.....	Drain ditch	8.73	.41	.29	1.63	5.24	5.24	1.16
Fresno	Fresno	O. V. P. Stout.....	Ditch	9.90	1.37	.67	2.33	3.49	3.49	2.04
Fresno	Fresno	O. V. P. Stout.....	Ditch	14.57	.89	.16	1.57	9.62	9.62	2.33
Fresno	Fresno	O. V. P. Stout.....	Ditch	8.74	.19	.34	2.09	3.79	3.79	2.33
Fresno	Fresno	O. V. P. Stout.....	Pond	18.93	4.09	.69	1.22	10.49	10.49	2.44
Fresno	Fresno	O. V. P. Stout.....	Post hole	37.30	10.67	4.08	1.86	14.57	14.57	6.12
Fowler	Fresno	W. E. Price	Pond	15.74	1.77	.33	.82	9.33	9.33	3.49
Temescal	Riverside	J. Bixby	Tunnel	35.27	5.56	.34	1.97	25.07	25.07	2.33
Temescal	Riverside	H. Daniels.....	Tunnel	32.07	5.02	.34	.47	22.16	22.16	4.08
Temescal	Riverside	H. Daniels.....	Tunnel	48.11	15.76	.69	1.63	26.24	26.24	3.79
Temescal	Riverside	H. Daniels.....	Tunnel	43.14	8.76	1.16	1.74	29.15	29.15	2.33
Coachella	Riverside ..	Land and Water Co.	Reservoir	8.76	2.90	.11	3.71	.64	.58	.82
Patton	San Bernardino	Dr. M. B. Campbell	Tunnel	11.65	1.31	.33	2.44	5.24	5.24	2.33
Oceanside	San Diego	H. D. Brodie .....	.....	32.06	10.97	5.42	1.10	12.24	12.24	2.33

SANITARY EXAMINATION OF WATERS.

Locality.	County.	Sender.	Source.	Grains per Gallon.		Parts per Million.			
				Total Residue.	Chlorids.	Ammonia.		Oxygen Consumed in Moist Combustion.	Nitrates.
						Free.	Albuminoid.		
SUITABLE FOR DOMESTIC USE.									
Redlands	San Bernardino	G. C. Thaxter	Spring	26.53	.19	.120	.092	2.30	None.
Riverside	Riverside	Riverside Water Co.		14.84	1.02	.060	.134	3.00	Minute quantity.
Lagunita Rancho	Solano	Mrs. E. R. Buckingham		18.66	.81	.032	.076	1.00	2.70
Sausalito	Marin	Captain O. C. Hamlet		9.33	.20	.022	.034	1.16	None.
NOT SUITABLE FOR DOMESTIC USE.									
Sausalito	Marin	Dr. H. Horn		11.66	.40	.230	.150	4.20	None.

EXAMINATION OF DRAIN WATERS FROM SOUTHERN CALIFORNIA.

This examination of drain waters was undertaken for the purpose of determining how much and the kind of alkali that may be washed out of a soil by rain water alone. The published records of the examinations of waters taken from underlying tile drain systems here and elsewhere are meager, and this record is to be understood as a preliminary one at best.

At the Southern California substation, Chino, San Bernardino County, in land charged with alkali, there has been established an underlying 3-inch tile drain, 600 feet on one and 30 feet on the other side of what is known as the 10-acre tract. This tile drain delivers water during the rainy season, and these waters represent the leachings from the soil above it which carries alkali in amounts varying from 1,000 to 12,000 pounds per acre, in a depth of 3 feet.

The exact amount of water from the tile drain, according to Foreman Mills, "is rather hard to determine, but a very close approximation is taken from the Station journal, as follows:

"1899, March 20th to April 5th, an average of 0.02 of a miner's inch.

"1900, January 4th to 15th, an average of 0.01 of a miner's inch. (February 1st, and for forty days thereafter, seepage water came in from an adjoining alfalfa plot, which was supplied from a flowing well used for irrigation.) November 19th to December 15th, an average of 0.20 of a miner's inch, all from rain.

"1901, January 5th to March 15th, an average of 0.04 of a miner's inch. The miner's inch used is the old one—9 gallons per minute."

The accompanying table gives the results of the analyses of fourteen samples of water from the tile drain mentioned above; one sample of drain water from Westminster; and several analyses of well water from the substation at Chino.

The greatest quantity of mineral matter taken out by the passage of rain water, down and through the soil and thence away from it through the tile drain, was naturally observed at the beginning of the rainy season, 1900, when the amount was found to be 124.8 grains per gallon. This mineral matter consisted of a very large proportion of common salt, magnesium sulfate (Epsom salt), and gypsum; the black alkali (carbonate of sodium) remained about the same as during the previous rainy season, at only a little over 2.5 grains per gallon. At the end of this winter, March, 1901, the total mineral matter drawn off amounted to only one fourth that at the start; the common salt had fallen off, so that it amounted to one fortieth; the magnesium sulfate, one fifth; and the gypsum to one eighteenth of that taken out by the earliest rain water of that season.

The Westminster drain in February, 1900, at the approach of the end of the rains, was found to be delivering water which contained nearly 105 grains per gallon of total salts very similar in composition to those washed out by the Chino drain, excepting that the nitrate in the latter was smaller, approximately one tenth; but it was washing out potash at a much higher rate than the average drain water at Chino. The well water at Chino has but 13.7 grains per gallon of strictly mineral matter, the chief constituent of which was carbonate of lime, 11.37 grains. This amount of lime carbonate equals that taken away by most of the drain-water specimens, and marks about the only point of similarity

TABLE SHOWING THE COMPOSITION OF DRAIN-WATERS FROM SOUTHERN CALIFORNIA (CHINO AND WESTMINSTER).

Locality of Drain, Date of Taking sample, Etc.	Color of Drain Water.	Duration of Flow.	Amount of Flow.		Potassium Sulfate.	Sodium Chloride.		Sodium Carbonate.		Sodium Sulfate.		Calcium Carbonate.		Calcium Sulfate.		Calcium Phosphate.		Magnesium Sulfate.		Magnesium Carbonate.		Magnesium Nitrate.		Iron and Alumina.		Silica.		Chemically Com- bined Water and Organic Matter, etc.		Total.		
			Daily.	For Time of Flow (average only).		Grains per 10,000	Parts per 10,000	Grains per 10,000	Parts per 10,000	Grains per 10,000	Parts per 10,000	Grains per 10,000	Parts per 10,000	Grains per 10,000	Parts per 10,000	Grains per 10,000	Parts per 10,000	Grains per 10,000	Parts per 10,000	Grains per 10,000	Parts per 10,000	Grains per 10,000	Parts per 10,000	Grains per 10,000	Parts per 10,000	Grains per 10,000	Parts per 10,000	Grains per 10,000	Parts per 10,000	Grains per 10,000	Parts per 10,000	
																																Days.	Gallons.
Chino Drain—																																
1899.																																
March 27th	Colorless	17	250	4,250	very small	1.35	.23	2.52	.42	10.99	1.90	4.96	.85	very small	trace	small	very small	.21	.03	trace	2.04	.35	6.13	1.05	28.20	4.83						
1900.					.64	.12	1.35	.23	1.42	.25	14.18	2.43	7.26	1.24	4.77	.81	1.08	.18	6.31	1.08	1.76	.30	.92	.16	trace	1.47	.25	8.74	1.50	49.90	8.55	
January 5th	Colorless				very small	1.35	.23	3.09	.53	5.06	.87	10.96	1.88	.83	.14	trace	small	small	.12	.02	trace	.58	.10	4.25	.73	26.24	4.50					
To January 18th	Colorless	13	125	1,825	very small	1.35	.23	2.22	.38	4.09	.70	4.53	.78	.17	.03	.97	.17	1.65	.28	3.00	.51	.15	.02	.35	.06	.59	.10	6.99	1.20	26.29	4.50	
February 2d	Colorless (only seepage from alfalfa plot.)				.23	.04	1.35	.23	2.22	.38	4.09	.70	4.53	.78	.17	.03	.97	.17	1.65	.28	3.00	.51	.15	.02	.35	.06	.59	.10	6.99	1.20	26.29	4.50
November 23d	Deep yellow		7,344		.43	.07	14.22	2.43	2.84	.48	16.61	2.85	10.49	1.80	39.51	6.80	3.88	.66	31.00	5.30	3.14	.54	1.02	.17	.51	.08	1.16	.20	17.49	3.00	142.30	24.38
November 24th	Colorless		2,000		small	10.14	1.74	2.74	.47	39.95*	6.85	40.58†	6.98	large	small	large	small	.82	.14	small	1.57	.27	15.16	2.60	110.96	19.05						
November 27th	Colorless		2,326		small	7.46	1.28	2.44	.42	29.29*	5.04	30.90†	5.30	large	small	large	small	.46	.06	small	1.74	.30	9.91	1.70	82.20	14.10						
December 1st	Colorless		2,000		small	4.78	.81	2.44	.42	27.68*	4.36	22.16†	3.80	large	small	large	small	.09	.005	small	1.16	.20	8.16	1.40	66.47	11.385						
To December 5th	Colorless	28	200	57,200	.20	.04	2.97	.51	1.98	.34	13.17	2.26	5.94	1.02	8.62	1.48	.97	.17	3.00	.51	1.18	.20	trace	.47	.07	1.74	.30	7.58	1.30	47.82	8.20	
1901.					.30	.05	5.42	.93	1.22	.21	8.16	1.40	6.76	1.16	6.18	1.06	small	9.87	1.66	3.38	.58	1.27	.22	17	.03	1.74	.30	6.12	1.05	50.59	8.65	
January 5th	Colorless		2,000		small	1.34	.23	.49	.08	13.38*	2.30	18.07†	3.10	large	small	large	small	1.11	.19	small	1.34	.23	3.20	.55	38.93	6.68						
January 15th	Colorless		2,400		small	2.64	.46	.75	.13	21.43*	3.70	19.82†	3.43	large	small	large	small	.63	.11	small	1.16	.20	4.37	.75	41.84	8.78						
February 15th	Colorless		2,200		small	2.04	.35	.75	.13	10.15	1.75	18.07†	3.10	large	small	large	small	.30	.04	small	2.44	.40	3.26	.56	37.01	6.33						
March 2d	Colorless		4,320		small	2.04	.35	.75	.13	10.15	1.75	18.07†	3.10	large	small	large	small	.30	.04	small	2.44	.40	3.26	.56	37.01	6.33						
To March 12th	Colorless	69	2,500	27,600	.23	.04	.33	.06	.24	.04	6.00	1.03	8.16	1.40	2.39	.46	trace	6.53	1.12	4.61	.79	.35	.05	.58	.10	1.45	.25	5.83	1.00	36.70	6.34	
Westminster Drain—																																
February 1900.	Pale yellow				.51	.088	5.41	.928	1.64	.264	10.17	1.745	21.21	3.638	44.14	7.743	.63	.109	15.01	2.403	3.70	.635	.10	.017	.47	.080	2.04	.350	8.46	1.450	113.39	19.450
Water from Well-holes, Chino -																																
August 28, 1900					very small	1.74	.30	2.04	.35	2.05	.35	8.79	1.55	trace	trace	none	small	none	very small	3.09	.53	2.33	.40	20.04	3.48							
August 28, 1900					very small	.81	.14	2.44	.42	2.58	.44	9.50	1.63	trace	trace	none	small	none	very small	1.86	.32	1.10	.19	18.29	3.14							
Water from Well, Chino -																																
July 16, 1901					very small	.67	.11	.47	.08	1.19	.21	11.37	1.95	small	trace	none	small	none	very small	small					2.33	.40	16.03	2.75				

* Includes considerable magnesium sulfate. † Includes large quantity of gypsum.

that exists between the well and drain waters. Water from the well-holes on the 10-acre tract, with 18 grains of mineral matter, was of similar character to that of the well water.

It is perhaps interesting to take one example to show what the figures in the above table of results mean; for instance, the water of the drain, November 22, 1900, when the drain was running at the rate of 7,344 gallons per day, may be shown to be washing out total alkali to the amount of nearly 70 pounds daily. This consists of:

	Pounds.
Potassium sulfate	0.46
Sodium chlorid (common salt)	14.91
Sodium carbonate (black alkali)	3.00
Sodium sulfate (white alkali)	17.57
Magnesium sulfate (Epsom salt)	32.42
Magnesium nitrate	1.05

Reference to the large table shows that during the twenty-six days following November 22d, the drain passed off, upon the average, something like 563 pounds of alkali, of approximately the same composition as given above for the first day's washing; or, in a period just over three weeks, rain water alone should have reduced the alkali in the spots containing the minimum (1,000 pounds) of it, about one half, so that in the spots containing 12,000 pounds the winter rains should have made a very appreciable diminution. This is suggestive of what might be expected with underlying drains arranged in proper system and the copious use of irrigation water, and illustrates the importance and rapidity of this method of reclaiming alkali land.

Following out the idea of the example given above, it is easy to calculate that the November 22d drain water was taking away daily considerable available plant-food, viz.: 2.28 pounds, consisting of potash (K_2O), 0.25 pound; nitrogen, 0.17 pound, and phosphoric acid, 1.86 pounds; or enough potash for a crop of 100 pounds of *oranges*; phosphoric acid for 1,000 pounds of *almonds, olives, or walnuts*; and nitrogen in quantity for at least a 100-pound crop of a majority of the common fruits. But, of course, a soil which loses this quantity of plant-food is ordinarily a rich one and amply able to stand the draught put upon it by a complete system of underdrainage and employment of plenty of water to remove the alkali.

FOODS, FEEDING-STUFFS, FERTILIZERS, ETC.

By G. W. SHAW.

The chemical analyses of foods, feeding-stuffs, and fertilizers have been continued during the past year in cases where public interest seemed to warrant such analyses. The policy has been to undertake the analysis of such miscellaneous samples only when something more than private interest was indicated. There is a widespread idea in the State that the Experiment Station will undertake to analyze all sorts of material—even though it may not have the remotest connection with agriculture, and though it can serve no good purpose to the public as such, but is only of interest to the individual who sends it. This undesirable condition has so increased the volume of samples sent for examination that it has become almost imperative to curtail such mis-

cellaneous analyses as much as possible. So great is the demand for such analyses that the entire time of two men would be required to meet the demands made upon the chemical division in such work alone. As it is, much time that could otherwise be more profitably employed in well-outlined experiments is absorbed in such disconnected analytical work. I desire to call attention to this condition, and to suggest that some general regulation be made whereby a larger amount of such work can be turned away, and thus allow a larger share of attention of the chemists to be devoted to definitely outlined investigations.

I desire hereby to express my appreciation of the services of Mr. C. A. Triebel, student assistant in the laboratory, who has been of the greatest assistance in much of the routine work of analysis of the materials discussed under this head. To him belongs much of the credit for the work.

ANALYSES OF FOODS AND FODDERS.

Ajonjoli Meal, known also as bene-seed meal and sesame-seed meal; sent by W. P. A. Brewer, San Mateo, Cal. This is a seed meal produced in Mexico and quite extensively used as a cattle food in that country. The analysis is stated below in a table which also shows an average of twelve analyses of meal of the same kind by European chemists. For the sake of comparison, there are also included analyses of several other meals belonging to the same class of foodstuffs.

While there are no data at hand showing the digestibility of sesame meal, yet it may be fairly assumed that it does not differ much from linseed meal in this respect. Judging from the table it would appear that a portion of the fat of the Mexican sample had been extracted for the manufacture of sesame oil. It will be noted that the nutritive qualities of this meal are high. In protein it stands high, which is also true of the fat (ether extract). If the material can be had upon the market at a fair price it should make a valuable addition to our stock of concentrated cattle foods.

Linseed Meal, sent by F. W. Dickson, San Geronimo, Cal. The sample was suspected of adulteration with peanut meal. Analysis of the sample is shown in the table.

The analysis does not indicate with certainty the adulteration suspected, from the fact that the results fall within the range of linseed meals, yet it must be said that the fat content is higher and the albuminoids lower than would be expected in the case of a normal linseed meal.

Cottonseed Meal, sent by Otis, McAllister & Co., San Francisco. The sample was suspected of having undergone fermentation. It was analyzed with the results shown in the table.

The analysis shows the sample to contain much more fiber and less nitrogen-free extract than it should for a good quality of cottonseed meal. Microscopic examination indicated this to be due to the presence of more shell than is customary in such meal, which also serves to explain the dark color of the sample leading to the belief that it had fermented, but which does not appear to have taken place.

Blood Meal, sent by E. N. Adriance, Napa, Cal. Analysis is shown in the table.

Although somewhat high in albuminoids and moisture, it is a fair sample of blood meal, a material quite variable in its composition.

ANALYSES OF MEALS.

	As Analyzed.						Calculated to Water-Free Basis.					
	Water	Dry Matter	Ash	Protein	Fiber	Nitrogen-Free Extract	Ether Extract (fat)	Ash	Protein	Fiber	Nitrogen-Free Extract	Ether Extract (fat)
Sesame meal, Mexican sample	7.40	92.60	8.77	36.67	3.81	17.34	26.01	9.46	38.52	4.11	19.73	28.19
Sesame meal, European (av. of 12 anal.)	5.50	94.50	6.47	20.30	7.15	14.98	45.60	6.84	21.48	7.55	19.98	48.15
Cocunut oil-cake meal	14.08	85.92	4.36	19.51	9.53	42.12	10.40	5.71	22.77	11.09	48.29	12.14
Cottonseed meal	9.85	90.15	4.86	47.25	3.19	22.64	12.21	5.38	52.38	3.53	25.07	13.64
Linseed oil-cake, N. P.	10.93	89.07	4.50	30.70	8.89	37.95	7.03	5.05	34.46	9.98	42.62	7.89
Wheat bran	11.67	88.33	5.18	14.05	8.16	57.34	3.90	5.86	15.86	9.24	64.96	4.08
Linseed meal, San Geronimo	8.75	91.25	5.91	33.25	7.27	37.69	7.73	6.47	36.32	7.97	40.77	8.47
Cottonseed meal, San Francisco	7.62	92.38	5.95	39.19	15.97	18.91	12.33	6.47	42.30	16.09	21.80	13.34
Blood meal, Napa	10.43	89.57	3.16	80.68	-----	4.86	.87	3.53	90.08	-----	5.41	.98

ANALYSES OF ACORNS.

		As Analyzed.						Calculated to Dry Matter.					
		Water	Ash	Protein...	Carbo-hydrates	EtherEx-tract	Shell	Ash	Protein...	Carbo-hydrates	Ether Ex-tract		
Acorn, <i>Q. lobata</i> .													
Kernel	-----	34.39	1.39	4.18	54.65	5.39	-----	2.12	6.36	83.30	8.22		
Whole	-----	27.52	1.13	3.39	45.38	4.38	24.69	1.59	4.73	62.92	6.07		
*Acorn, <i>Q. lobata</i> (California).													
Kernel	-----	7.50	2.40	5.20	76.30	8.66	-----	2.70	5.82	82.32	9.36		
Whole	-----	5.40	1.70	3.70	54.60	6.10	30.12	1.79	3.91	57.73	6.45		
*Acorn, <i>Q. Emoryi</i> (Arizona).													
Kernel	-----	4.10	2.40	8.10	48.00	37.40	-----	2.50	8.55	49.81	39.14		
Whole	-----	2.60	1.60	5.20	30.90	24.10	35.60	1.64	5.33	32.69	24.74		

* Analyses by Maine Experiment Station.

White Oak Acorns (*Quercus lobata*), from Creston, Napa County; sent by J. C. Waterbury. These acorns are much relished by pigeons and fowls as food, and are used quite abundantly as food for hogs. These sweet acorns are quite palatable to man, and in the earlier years were very generally used as food by the Indians. As a matter of interest two other analyses of acorns made by the Maine experiment station are given in the same table (page 85).

It will be noted that the two samples of *Q. lobata*, also known under the names Valley Oak and White Oak, were in a much different condition when analyzed in Maine than when analyzed at this Station. They were evidently very dry, as they showed but 5.40 per cent of water against 27.92 per cent when taken from the fields as in the case of those analyzed at this Station. The difference is not essential, however, when the calculation is made to a water-free basis. It is interesting to note the fact of a wide difference in composition between the California samples and that from Arizona, especially in the fat content, the Arizona sample of *Q. Emoryi* acorns carrying about four times the amount of fat found in the *Q. lobata*. Further, the *lobata* appear to be about 2 per cent lower in their protein content. This is quite important in indicating the superior quality of the *Q. Emoryi* acorns as a food.

Native Bird's-Foot Clover (*Lotus californicus*), sent by W. B. Cartmill, Tulare. In some seasons this native clover grows abundantly in this locality and is said to produce as high as three tons per acre. Stock eat it with avidity. It is locally known as "wild pea."

	Air Dry.						In Dry Matter.					
	Moisture	Ash	Protein	Fiber	Ether Ex-tract	Nitrogen-Free Ex-tract	Dry Mat-ter	Ash	Protein	Fiber	Ether Ex-tract	Nitrogen-Free Ex-tract
Bird's-foot clover	8.02	8.35	12.25	18.80	5.97	47.41	91.98	9.08	13.10	20.44	6.49	50.89
Alfalfa	10.95	6.43	17.60	22.63	3.08	39.31	89.05	7.22	19.77	25.43	3.46	44.12
Vetch	11.30	7.90	17.00	25.40	2.30	36.10	88.70	8.90	19.16	28.62	2.60	40.72

From the above table it will be seen that this native clover is inferior to either the vetch or alfalfa in protein content, and carries a proportionally higher amount of carbohydrates. The fiber is also smaller in quantity, which is favorable to a high digestive coefficient. It is likely to prove a good cattle food, standing midway between the grasses and alfalfa.

ANALYSES OF BREAKFAST FOODS.

Within the past few years a very large number of manufactured cereal breakfast foods have been placed upon the market, and this number is constantly increasing. Investigations as to the relative chemical value of these foods, and for establishing so far as possible the truth or falsity of the claims made by the manufacturers and appearing on the label inclosing the package, seemed desirable. The means used for the preparation of these foods are so various and the products them-

selves are so diverse that it would be very difficult to fix absolutely the relative food value of the grains themselves; yet a comparison of the composition of the foods in question with that of the common cereals is of interest to the purchaser in indicating what differences may exist between the food in question and the standard rolled oats or wheat so long upon the market; and further in indicating to what extent the claims made by the manufacturer are true.

While the investigation is far from complete, yet some of the results are so striking that it is thought best to include them in this report.

Imperial Granum, an infant and invalid food long upon the market, gave the composition shown in the table.

The only claim made by the manufacturers is that it is an excellent food for infants and invalids, and that it is made from "wheat—nothing more," and the claim seems to be well founded. While the ash and the fat contents of the product are somewhat lower than the average for wheat, yet they are within a possible range, and the albuminoid content is essentially the same as that of good Eastern wheat—higher, however, than that of the Pacific Coast wheats, which are generally low in that substance. The fact that no sugar was found present would indicate that no malting had been attempted.

Malta Vita, prepared by the Malta Vita Pure Food Co., Battle Creek, Mich. It is claimed to be a "concentrated malted food, thoroughly cooked and predigested. The only food containing all the elements in the proper proportion. Contains neither starch nor glucose." "A tea-cupful eaten with cream or fruit juice furnishes more nutriment to body and brain than a pound of prime beef." The analysis is given in the table.

Further examination showed that the carbohydrates contained 68 per cent of starch. It is evident that the material is far from being true to label. The composition is essentially that of good Eastern wheat. The claim that the food carries no starch is entirely unfounded. As a food for people in health this Malta Vita is all right, but people who desire starch-free food should avoid it.

Phospho Nonstarch Flour, made by the Phospho Health Food Co., Los Angeles, Cal. The prominent headline in red type at the top of the wrapper of this package is "Starch is the Staff of Death." "This flour is made from select California wheat noted for its high percentage of gluten, phosphates, and the albuminoids; is sterilized, partly digested, and rendered open or 'fluffy' by mechanical means that eliminate the objectionable elements so offensive to taste and smell in gluten flours. No acids or chemicals are used in this flour." It further claims to be "remedial in most all alimentary affections." Analysis is given in the table.

While the claim that this preparation is made from California wheat may be true, yet the analysis shows it not to be made from a wheat of high gluten content. It is apparently made from a soft winter wheat. Neither do facts bear out the statement that California wheats are high in "gluten, phosphates, and the albuminoids." The analysis would show the material to be made from a good quality of Pacific Coast wheat. The average starch content of wheat is 71.25 per cent, and the starch content of this so-called "nonstarch" preparation is 71.73 per

cent, which would not indicate any treatment tending to lower the starch content of the wheat used. By people who desire a highly glutinous food this article should be avoided.

Ground Gum Gluten, manufactured by Pure Food Co., New York City. Analysis is given in the table.

The food is a highly glutinous one, but still carries a considerable amount of carbohydrates. It carries a larger amount of gluten than many of the so-called gluten foods, but hardly deserves the suggestive name of "gum gluten."

Ralston Flour, manufactured by Purina Mills, showed the composition given in the table.

The flour is apparently made from a good quality of Eastern wheat, and carries as high a gluten content as many of the so-called gluten preparations which really have no claim to such a classification.

Grano, made by the Acme Mills, Portland, Or., from "perfectly cleaned wheat." The analysis is given in the table.

This is apparently made from a Pacific Coast wheat, and is all that it claims to be.

ANALYSES OF BREAKFAST FOODS.

	Water	Ash	Albumin- oids	Fat	Carbo- hydrates
Imperial Granum	2.97	.54	12.73	.36	83.40
Malta Vita	10.48	.54	12.40	1.46	75.12
Phospho Nonstarch Flour	7.32	.91	11.38	1.53	78.86
Ground Gum Gluten	11.90	.90	26.75	1.40	59.05
Ralston Flour	11.94	.88	15.83	.51	70.84
Grano	10.89	1.86	12.70	2.61	71.94

FERTILIZERS.

Twenty analyses of fertilizers have been made to substantiate the claims made by various manufacturers, but it is deemed unwise to publish the detailed results of these analyses in advance of the operation of the fertilizer law. In general, however, it may be said that the samples have been equal to the guarantees furnished by the manufacturers. In but three cases has this been found not to be the case, and in but one of these was there a very manifest difference between the guarantee and actual facts.

SUGAR BEETS.

Numerous analyses of sugar beets have been made during the year in connection with definitely outlined experiments which are now in progress, the results of which will ultimately be published in bulletin form.

During the year there has been prepared a bulletin upon "The California Sugar Industry," which is a review of the condition of the beet-sugar industry in this State from the time of its inception until 1903.

OLIVE OIL MANUFACTURE.

During the year there appeared in a French publication a description of a process for the separation of olive oil by centrifugal means. To the end of demonstrating the feasibility of this method for use in California investigations were started, but on account of the late date at which the machine arrived from the East it was impossible to so thoroughly test the method as to warrant a recommendation for its general adoption. Work will be continued during the coming olive season in the same direction, and besides, certain chemical methods will be tried for the same purpose. If sufficiently important results are obtained they will be published in bulletin form.

SUMMARY OF BULLETINS ISSUED.

CALIFORNIA SUGAR INDUSTRY. PART I.

(Bulletin No. 149.)

This bulletin, by Professor Shaw, gives a general and historical review of the beet-sugar industry in California. The following is a brief summary:

California was the first in the United States to successfully manufacture beet sugar upon a commercial scale. She has placed beet sugar upon the market for the past thirty-three years, and this bulletin is the first of a series in which the conditions as they exist in the State to-day, from both the manufacturing and the agricultural standpoint, are and will be reviewed; and in which will be discussed such experimental work bearing upon the industry as has been and may be undertaken by this Experiment Station. This first number is historical in a large measure, reviews the industry from its establishment in 1857 up to the present time, and gives tables of statistics of the Alvarado, Watsonville, Chino, Los Alamitos, Crockett, Oxnard, Salinas, and Betteravia factories, as well as general considerations of the sugar industry.

THE VALUE OF OAK LEAVES FOR FORAGE.

(Bulletin No. 150.)

This bulletin, by W. W. Mackie, was issued in April, 1903, and covers 24 pages. It is fully illustrated with photographs taken by the author in the field.

During the summer and fall of 1902, while experting a forest reserve in the northern Coast Ranges, the writer noticed with surprise and interest the eagerness with which leaves of certain oaks were eaten by live stock. Having this fact in mind, many observations were made in regard to the forage value of each species of oak occurring in the Coast Ranges. These observations, while confined more especially to the extent to which each species was eaten by stock, included also the range or distribution, altitude, and mode of occurrence. Later in the year, in order to ascertain, if possible, whether these observations indicated fully the real value and significance of these oaks for forage, a chemical analysis was undertaken covering six species of oaks and one of poison oak. Only those species were chosen which occur on hills, ridges, and mountains where tillage is impossible; and the object kept continually in mind was the forage value of the leaves of the different species.

The purpose of this bulletin is to give in full the results of both observation and analysis, and to discuss the harmony or lack of harmony between the two.

The oaks described are the Blue oak (*Q. douglasii*), Scrub oak (*Q. dumosa*), Curl-leaf Scrub oak (*Q. dumosa* var. *bullata*), Cañon Live oak (*Q. wislizeni*), Maul oak (*Q. chrysolepis*), Black oak (*Q. californica*), Mountain White oak (*Q. garryana*), and Poison oak (*Rhus diversiloba*). Analyses of the leaves of these are given and their values for browsing purposes discussed.

FRUITS AND MISCELLANEOUS ARTICLES.

By GEORGE E. COLBY.

EXAMINATION OF SUGAR PRUNES (BURBANK'S) FROM SEVERAL LOCALITIES.

This work was done at the request of growers, to ascertain the value (chiefly the sugar content) of this variety as compared with the standard, the California French prune. Both the fresh and the dried fruit from the same crop and orchard have been tested, and for brevity and convenient comparison are tabulated below.

TABLE SHOWING THE COMPOSITION OF FRESH SUGAR PRUNES.

Locality.	Sender.	Date of Picking.	Size.		Flesh	Pits (Waste Matter)	Total Sugar
			Average Weight	Number per Pound			
<i>Sugar Prunes (Fresh).</i>			<i>*Gram</i>		<i>Per Ct.</i>	<i>Per Ct.</i>	<i>Per Ct.</i>
Millbank.....		Oct. 7,'98	51.1				
Santa Rosa.....	L. Burbank ..	Aug. 10,'99	50.0	9.1			
San José	S. H. Shelley.	Aug. 1,'00	52.0	9.0	94.0	6.0	16.7
San José	S. H. Shelley.	Aug. 24,'00					13.7
Los Gatos	H. G. Osburn.	May 15,	44.1	10.3	94.8	5.2	17.6
San José (Ripe fruit from tree)	S. H. Shelley.	Aug. 20,'02		13.0	94.1	5.9	20.53
San José (Fruit from ground under tree)	S. H. Shelley.	Aug. 20,'02		12.0	94.6	5.4	14.80
San José	S. H. Shelley.	Sept. 1-30,		20.4	94.2	5.8	18.50
San José (Unripe fruit) ...	S. H. Shelley.	Aug. 21,'02	34.2			5.4	7.75
Napa	L. Coates ...	Aug. 21,'02	34.4	13.2		5.4	17.40
<i>Other Prunes (Fresh).</i>							
Clairette Mammoth, Napa...	L. Coates ...	Aug. 21,'02	43.0	10.5		4.3	15.90
Splendor, Napa.....	L. Coates ...	Aug. 21,'02	28.3	16.1		5.7	15.30
Robe de Sergent, Napa ...	L. Coates ...	Aug. 21,'02	32.3	14.1		5.4	12.60
French Petite (Unripe), Napa	L. Coates ...	Aug. 21,'02	27.6	17.0		4.2	12.60
Average California French prunes				20.4	94.2	5.8	18.50

* About 30 grams are equivalent to one ounce.

In the San José samples of sugar prune the content of sugar has apparently risen in the fresh fruit from about 14.0 in 1900 to 20.5 per cent in 1902; the Napa Valley production was some 3 per cent below

this in the latter season. There was then every reason to expect from the above quantity of sugar that when dried so that the water content should be reduced from 73 to a little less than 25 per cent (the amount ordinarily found in dried French prunes), the *dried sugar prune* should contain about as much sugar as does the dried French prune, which in the Santa Clara Valley has been shown to contain over 50 per cent of sugar. Samples of the dried fruit were subsequently sent, at our request, from the same orchard and crop, and the results of analysis are given in the next table.

TABLE SHOWING THE SIZE AND SUGAR CONTENT OF DRIED PRUNES.
(From the same crop and orchards as the fresh fruit of the other table.)

Variety of Dried Prune.	Locality.	Sender.	Average Weight	Number per Pound	Pits	Total Sugar
			Grams.		Per Ct.	Per Ct.
Sugar Prune.....	San José.....	S. H. Shelley	12.50	36.2	14.0	50.00
Sugar Prune.....	Napa.....	L. Coates.....	14.28	32.6	13.0	49.50
Robe de Sergent.....	Napa.....	L. Coates.....	11.00	41.2	15.0	39.10
Splendor.....	Napa.....	L. Coates.....	9.00	50.4	10.0	39.10
French.....	Napa.....	L. Coates.....	9.00	50.4	13.0	45.40
Imperial.....	Napa.....	L. Coates.....	12.50	37.8	16.0	37.90
Sugar, maximum in dried French Prune.....						54.00

These results are not extraordinary, but the total sugar (49.5 per cent), shown by the sugar prune, gives it great value as compared with the best result (54.0 per cent) found in California French prunes.

The dried sugar prune from Santa Clara Valley this season (1902) was only one half point higher than the Napa fruit. It is admitted that the sugar prune dries and makes as acceptable an article of diet as does the French prune; it therefore seems well worthy of the large orchard area now given to it in many sections of the State, especially in the Santa Clara Valley.

COMPARATIVE SOLUBILITY OF ALUMINUM AND TIN IN LEMON JUICE.

A sample of lemon juice, which had been extracted from the fruit in an aluminum vessel, was sent for examination by H. Culbertson of El Cajon, San Diego County, to ascertain whether the metal was attacked by the citric acid. An affirmative result was obtained, and for comparison the amount of tin dissolved in the lemon juice is also given:

	Parts per 10,000.
Dissolved aluminum*	0.35
Dissolved tin	0.28

*Corrected approximately by proper allowance for aluminum contained in alumina of the natural lemon juice.

These figures represent amounts of dissolved metal so small that they need not be reckoned with from any ordinary point of view. However, the use of any metallic vessel should be avoided for the work in question, on account of the great uncertainty of the amount of metal liable to be dissolved. The employment of platinum for this work is ordinarily entirely out of the question, because of its great expense. A porcelain vessel, or one lined with porcelain (enameled or granite ware), is best.

COMPOSITION OF COMMERCIAL ALKALIES ("CONCENTRATED LYE").

Very often this Station receives questions as to the relative purity and strength of these articles upon the market; from time to time analyses are made and the reports sent to the party interested.

Since the value of these materials lies in the amount of caustic soda (NaOH) or potash (KOH) contained in them, for the purpose of making tree-washes, prune dips, soap, etc., the statement showing the amount of caustic lye is sufficient to guide the purchaser.

The most recent set of tests made by the writer upon samples bought by him in the open market is reported in the statement following:

SODA LYES.		Caustic Soda (NaOH).
Greenbank soda		97.6%
Red Seal soda lye		92.2
"Merry War" lye		87.5
Babbitt's lye		82.4
American concentrated lye		68.5
POTASH LYES.		Caustic Potash (KOH).
Canadian crude potash and concentrated wood ashes		71.4%
Refined pearlashes		69.1

The English, or Greenbank's soda lye, maintains its well-known high standard of purity—an earlier analysis showing it to contain 99.3 per cent (98 is the guarantee) of caustic soda. The newer concentrated lye, Red Seal brand, made in Philadelphia, is the next best article on the market, but it is closely followed by the "Merry War" brand, with 87.5 per cent of caustic soda; it is made by Myer Lye Co., St. Louis.

The P. T. Babbitt lye, from New York, is only 82.4 per cent pure, but far superior to that called American concentrated lye, put out by the Pennsylvania Salt Manufacturing Co., Philadelphia.

The public should look carefully to the name of the manufacturer upon each and every package, as the cans containing the lyes are usually all wrapped in red paper.

EXAMINATION OF BRINE FROM PICKLED OLIVES FROM SPAIN.

Frequently, within the last few seasons, requests have been made that we determine the character and ingredients contained in the brine drawn off from the foreign fruit. In order to satisfy this demand the latest specimen, from the Fresno Olive Works, was rather freely tested. The results of the examination are as follows:

Taste salty; odor slightly acetous and similar to that of laurel leaves; reaction strongly acid, but not mineral, i. e., it contains no free sulfuric, hydrochloric, or nitric acids.

Total Solids in Brine.

	Per Cent.
Soluble in water after drying	5.88
Insoluble in water after drying .....	.20
Organic matter	1.92
Total solids	8.00

The *soluble part* consists chiefly of common salt (91.3 per cent); together with small quantities of sodium sulfate and magnesium chlorid.

The *insoluble part* consists of calcium and magnesium carbonates, with a small amount of calcium sulfate.

Antiseptics.

Boracic acid	None
Salicylic acid	None
Benzoic acid	None
Niter	None

This examination shows that the brine is substantially a 5.5 per cent solution of common salt. The other mineral matter in the brine, amounting to but one tenth of the whole, consists of only those salts which should be obtained from the juice of the fruit, or from the common salt itself; or perhaps from the water used in making the brine. Apparently, while the brine is slightly acid, none of the common acid preservatives have been used in compounding it, as the tests for salicylic, benzoic, and boracic acids were negative, nor has free sulfuric acid been used. Niter is also absent. There is no evidence that any aromatic principle has been employed, except perhaps *laurel leaves*. Earlier analyses, made in this laboratory, of brine taken from Spanish olives also show that common salt, in varying proportions, is relied upon without the addition of niter.

EXAMINATION OF "NATURE'S WONDER" FERTILIZER-INSECTICIDE.

This article is manufactured by the Twentieth Century Novelty Company, Chicago, Ill., and described by them in an advertisement as a "substance which is not only a *fertilizer*, or *tonic* for the soil, but is an insecticide, destroying insects, flies, worms, etc. Price, per four-ounce package, twenty-five cents," or one dollar per pound. The sample was sent by Henry Fox, of Healdsburg, Cal.

General Analysis.

	Per Cent.
Sand, dirt, etc.	52.0
Iron sulfate (dry)	16.0
Marble dust, gypsum, organic matter (sassafras, etc.) and chemically combined water	32.0
Total	100.0

Analysis showing Manurial Value.

	Per Cent.
Nitrogen, from organic matter	0.31
Phosphoric acid	0.83
Potash (K_2O)	0.17
Valuation per ton of 2,000 pounds	\$1.90
Valuation per pound	0.0093

This article, like many proprietary preparations offered as insecticides, is harmless to pests, and its manurial value is only \$1.90 per ton. Its *total cash value*, including the *copperas* (iron sulfate), is, per four-ounce package, only one half of one cent, or the purchaser is overcharged 24½ cents for this little parcel.

EXAMINATION OF GRAIN DAMAGED BY WATER.

1. *That Damaged by Salt Water.*—Two lots of grain (one of barley and the other of wheat), from the ship "Pyrennes," supposed to be damaged by being under water fourteen months, were received from P. R. Thayer, of San Francisco, to determine the extent of injury suffered by the grains.

The analyses show clearly that the barley is worth much more for feed than as a fertilizer, being but little changed save as to taste. The amount of salt present is not excessive, if the grain is fed in proper proportion with other feed, such as hay, and in fact is very much as though it had been siloed. There is no reason to suppose that it would be injurious to stock unless it were allowed to mildew. To prevent this it should be kept in closed tanks, barrels, or hogsheads, where silos are not available.

The wheat was hurt a little more than was the barley, but yet, as it stands, is good cattle feed, if the animals do not object to the flavor. It contains less salt than the barley. The nutritive quality in this case is more impaired by the conversion of the "albuminoids" into "amid" forms, which are of much inferior nutritive value. The loss of nitrogen was probably not as great as the comparison with the average wheat of the United States would indicate, because if it was *California* wheat the figure 12.1 should be replaced by 9.8 per cent, which is the average for California. The loss in albuminoids, or flesh-formers, of course results in a relatively higher percentage of starch, shown above for the damaged grain.

2. *That Damaged by Fire and Smoke.*—This lot consisted of wheat, and was sent by Jonas-Erlander-Davis Company of San Francisco. The result of the examination of this grain showed that it does not contain any injurious (poisonous) matters, such as phenols, acetones, aldehydes, and only a trace of acetic acid. It therefore can be offered to poultry and hogs with safety; perhaps it is worth while soaking it in water containing one per cent of sal soda, and washing with fresh water before feeding it to animals, as this removes the greater part of the strong smoky odor and burnt taste, and does not impair its food value.

GENERAL PROXIMATE ANALYSIS.

	Barley.	Wheat.
Water	Per Cent. 45.67 (ammonia, .07%)	Per Cent. 40.56 (ammonia, .06%)
Organic matter { Water-soluble	4.32 {	3.44 {
{ Insoluble	47.61 {	54.69 {
Ash	2.40 (common salt, .83)	1.31 (common salt, .35)
Totals	100.00	100.00
Free acid (in terms of sulfuric, SO ₃)	0.18	0.17

FOOD AND MANURIAL VALUES.

	Water	Nitrogenous Matters.		Carbohydrates.		Fat	Fiber	Ash	Total	Fuel Value, 1 lb. Calories	Manurial Value per Ton
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Barley.	45.6	4.0	1.2	41.6	2.5	1.4	1.3	2.4	100.0	---	\$3.90
Substance as received											
Water-free substance		9.8		81.0		2.6	4.3	4.3	100.0	1.646	---
Barley (average composition), water-free		13.9		81.4		2.0	---	2.7	100.0	1.400	---
Wheat.	40.5	2.4	.9	50.2	1.2	1.6	2.0	1.2	100.0	---	2.50
Substance as received											
Water-free substance		5.5		84.3	2.0	2.7	3.3	2.2	100.0	1.360	---
Wheat (average composition), water-free		12.1		83.5		2.4	---	.2	100.0	1.400	---

COMPOSITION OF ALMOND PASTES FOR MACAROONS, PASTRIES, BON-BONS, ETC.

As is well known by every housewife, the chief ingredient of these pastes is the clean, white almond kernel reduced to a fine powder. These valuable articles of cookery are manufactured in the East by several companies from *imported shelled almonds*, and the purpose of this examination was to determine their composition, and from this the *formulas* for compounding them. The examination was made at the request of the California Nutmeat Company of San Francisco, with a view to the manufacture of paste from California-grown almonds as a basis.

MATERIALS EXAMINED.

Sweet Almonds Kernels.—Cleaned and white, with no characteristic flavor.

Bitter Almonds.—Clean, white kernels, with very strong characteristic bitter taste. These possibly are of use in very small proportion (1-16) in the manufacture of pastes; simply for flavoring.

Peach-Pit Kernels.—Uncleaned, flavor very pronounced, taste bitter and too strong to admit of the use of much of them in paste-making; the probability is that the very high proportion of shell (waste) to kernel in the pit would always make the meat too expensive for any very extensive use.

Apricot-Pit Kernels.—Clean, white product, of very bitter taste. These yield a very fine grade of oil, which is often used in confections.

Pastes.—*Chapman's*, a tenacious, gray-colored compound, which is not easily worked or broken up; its taste was quite sweet. *Spencer's*, a tougher, more "sodden" compound and harder to work than Chapman's, but rather sweeter. *Heide's*, a gray compound, which breaks up easily in the hand, *i. e.*, is friable; very sweet. All three pastes have a pleasant flavor characteristic of bitter almonds, but not the strong, burning one of the nutmeat of peach, bitter almond, or apricot kernels alone. The Heide paste is the most desirable of the three for the baker, because, in his finished product, *appearance* (retention of form), besides taste, is of vital importance. The Heide paste, from its physical condition, will undoubtedly fulfill this requisite, when the Chapman and Spencer pastes will yield poor-grade products.

TABLE OF ANALYSES OF ALMOND PASTES.

	Almond Pastes.			Clean Almond Kernels.	
	Chapman's Chicago.....	Henry Heide's New York.....	Spencer's New York.....	(California- grown, (Cal. Station Bulle- tin 113, p. 12)	Foreign-grown (Braunt)
Water	Per Cent. 23.7	Per Cent. 22.0	Per Cent. 27.0	Per Cent. 5.0	Per Cent. 3.80
Protein	13.1	12.7	13.5	20.9	23.00
Oil (fat)	25.5	20.0	26.2	54.7	53.30
Carbohydrates:					
Sugar { Cane	19.0	34.0	24.0	none	none
{ Glucose	trace	trace	trace	variable?	6.00
Starch	*11.3	small	very small	-----	none
Gums and fiber, etc.	6.0	9.7	7.6	17.4	10.20
Ash	1.4	1.6	1.7	2.0	3.70
Totals	100.00	100.00	100.00	100.0	100.00

Salicylic acid, none.

* Cornstarch.

From this examination it appears that *Chapman's* almond paste consists of a mixture of nutmeat plus about an equal weight of material consisting approximately of 40 per cent of water, 40 of cane sugar, and 20 of cornstarch; that *H. Heide's* paste is nutmeat made up with an equal weight of material, consisting of 40 per cent of water and 60 per cent of cane sugar; and that *Spencer's* paste is nutmeat to which an equal weight of matter composed of one half each of water and cane sugar has been added.

The employment of *cornstarch* in the make-up of almond pastes is suggestive to every one, for it means that other substitutes for nutmeat may find their way into these articles; such as the oil-cake from other nuts, deprived perhaps of the greater part of their characteristic flavors, and oils extracted from bitter almonds, apricot and peach pit kernels. While some of these extraneous materials hardly affect the food value of the product, their presence certainly helps to explain the cause of so many pastes being *inferior* for the uses of the baker.

MISCELLANEOUS ANALYSES.

FRUITS, WINES, OLIVE OILS, GLUTEN FOODS, POISONED FOODS, ETC.

By G. E. COLBY.

Materials Examined.	Sender, Etc.	Remarks.
Oranges (80 samples)	So. Cal. Expt. Station (U. of C.), Chino	Study of fruits.
"Tilton seedling" apricot, fresh fruit	J. W. Baintow, Hanford	Sugar, 10.84 per cent.; Moorpark, fresh, 11.25 per cent.
"Tilton seedling" apricot, dried	J. W. Baintow, Hanford	Sugar, 35.10 per cent.
French prunes, unfertilized	C. H. Shinn, Niles	Sugar, 16.90 per cent.
French prunes, fertilized	C. H. Shinn, Niles	Sugar, 16.40 per cent.
Smyrna figs	G. C. Roeding, Fresno	Sugar, 20.00 per cent.
Baby food, normal nutriment	Yolo Mills, San Francisco	Food value given from analysis.
Breads (4 samples)	G. V. D. Brand, Pomona	No atom in them.
Biscuits (6 samples)	Sanitarium Food Co., St. Helena	"Gluten" determined.
Gluten meals (6 samples)	Sanitarium Food Co., St. Helena	"Gluten" determined.
Gluten flours (6 samples)	Sanitarium Food Co., St. Helena	Food value determined.
"Fruit Nuts"	W. Hoelscher Co., San Francisco	Alcohol, 19.90 per cent.
Wine	Migliavacca Wine Co., Napa	Acid, 0.42 per cent.
Red wine	Migliavacca Wine Co., Napa	Acid, 0.65 per cent.
White wine	J. T. Doyle, Cupertino	Acid, 0.60 per cent.
Red wine	W. Wehner, Evergreen	Analysis.
Red wine	Migliavacca Wine Co., Napa	Acid, 0.56 per cent.
Muscat wine	A. J. Poirier, Oakland	Analysis.
Loganberry wine	Tiburcio Parrott, St. Helena	Analysis.
Burgundy wine	Wm. Rennie, Fresno	Composition normal.
Wine residue	W. L. Horne, Berkeley	Contains neither alcohol nor antiseptics.
Zinfandel residue from "cold distillation process"	M. A. Lee, Berkeley	Alcohol, 18.10 per cent.
Imported prune brandy	M. A. Lee, Berkeley	Alcohol, 31.50 per cent.
California prune brandy	R. E. Parr, San Francisco	Pure.
Artificial prune brandy	W. L. Horne, Berkeley	Alcohol, 50.82 per cent.
Cold distilled brandy	Sanitarium Food Co., St. Helena	Alcohol, 2.0 per cent.
Fruit juice	Barton Estate Co., Fresno	Analysis; no preservatives found.
Grape juice (from Chicago)	H. O. H. Shelly, Cupertino	Manurial value average, i. e. \$5.19 per ton.
Grape pomace	J. D. Peters, Stockton	Manurial value, one half that of ordinary pomace.
Grape pomace (over-limed)	From various senders	All high grade.
Cyanide of potash (6 samples)	C. F. Blewett, Livingston	Sugar normal; 8.07 per cent.
Sweet potatoes (fresh)	S. Levy, Los Angeles	Sulfur, 43.57 per cent.
Sulfur ore		

Olive oil.....	W. E. Mack, Paradise	Pure.
Cheap olive oil (sold in Los Angeles).....	Ellwood Cooper, Santa Barbara.	Tests show it to be low-grade olive oil.
Olive oil (Napa Valley).....	Theo. Gier, Oakland	No adulterations.
Olive oil.....	James C. Strong, Los Gatos	Pure.
Olive oil.....	A. V. Stuart, San José	Pure.
Nutlard.....	Sanitarium Food Co., St. Helena.	Pure coconut lard.
Poisoned (?) bees.....	J. F. Flory, Lemoore.	No strychnine or arsenic.
Poisoned (?) chocolate.....	C. C. Teague, Santa Paula	None of the common poisons found.
Poisoned (?) meat.....	T. B. Evans, Hollister	No strychnine or potassium cyanide.
Poisoned (?) milk.....	Dr J. N. McGowan, Monterey	No mineral poisons.
Poisoned (?) cheese.....	O. Orr, Gilroy	<i>Typhozicon</i> ; none.
Strychnine sulfate.....	F. Austin, Econdido	Purity; 99.34 per cent.
Artificial wine color, red (John G. Beekler Co., maker).....	John Swett & Son, Martinez.	Azo-dye; non-poisonous.
Molasses.....	Golden West Co., San Francisco	Potash, 4.07 per cent; cane sugar, 42.2 per cent.
Honey.....	Albert Rozell, Los Angeles.	Pure.
Honey (California ?).....	Mariner & Hosking, Los Angeles.	Impure (contains commercial glucose).
Honey.....	K. E. Drummond, Los Angeles	Impure (contains commercial glucose).
Extract (oakbark).....	H. A. Merriam, San Francisco	Tannin, 36.50 per cent.
Extract, liquid.....	Gundlach-Bundschu Co., San Francisco.	Tannin, 25.30 per cent.
Nut-powder.....	Gundlach-Bundschu Co., San Francisco.	Tannin, 47.00 per cent.

THE INCREASE OF SOLUBLE MATTER IN BREAD BY TOASTING.

By E. W. HILGARD.

The toasting of bread to render it more palatable and supposedly more digestible, is a common practice, especially in England and the United States. There is no dissent as to the greater savoriness of well-made toast as compared with raw bread; and patients are treated to toast, or in certain stages to "toast tea," to afford nourishment when bread disagrees with them. It does not seem, however, that the exact extent to which toasted bread is more digestible than the raw has been investigated until it was taken up by Snyder (Bulletin No. 74, Minnesota Experiment Station, 1902), who made experiments with both artificial and human digestion, and sums up his conclusions as follows:

"The carbohydrates of toast were more readily acted upon by the diastase ferment than were the carbohydrates of (raw) bread. The protein of bread was 2.4 per cent more readily digested than that in toast. There was but little difference in the total digestibility of carbohydrates, but in the same length of time about half more of the starch was rendered soluble by the diastase ferment from toast than from bread. In the dietary of the workingman less nutrients were secured from toast than from bread."

His conclusion is that the greater digestibility of toast in the case of invalids is due to the sterilization brought about in toasting, whereby the fermentative bacteria which survive the baking process are killed.

The writer having a personal interest in a settlement of the toast question, caused some experiments to be made in 1900, for the determination of the increase in water-solubility of bread subjected to toasting; while at the same time determining the temperature corresponding to the different depths of color to which the operation is commonly carried.

It was found that "light toast" requires a temperature of about 150°, while "dark toast" is made at from 170° to 175°; it being understood that at these temperatures the entire mass of the slice is so transformed, through and through. When toast is made as is ordinarily done, by browning only the surfaces of the slice, the results hereinafter shown must of course be applied only to the proportional thickness of bread so transformed; which, even if done on both sides, is rarely more than one millimeter. The subjoined table shows the results obtained:

EXAMINATION OF TOASTS MADE AT DIFFERENT TEMPERATURES.

By George E. Colby.

	No. 1. Bread heated to 100 de- grees C.	No. 2. Light- (yellow) Colored Toast made at 150 de- grees C.	No. 3b. Brown Toast made at 170 de- grees C.	No. 4. Dark Brown Toast made at 174 de- grees C.	No. 3a. Brown Toast made in kitchen about 160 degrees C.*
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Loss on heating	34.70	35.30	36.07		
Soluble in water	12.62	12.45	26.14	25.5	21.77
Insoluble in water	87.38	87.55	73.86	74.5	78.23
Nitrogen, calculated to albuminoids in soluble part	1.70		.91		*1.90

* Unfortunately for this experiment, it was afterward found that the toast No. 3a, "made in the kitchen" to the exact color preferred by the writer, was of milk bread; so that the nitrogen determination under that head has no definite meaning in the premises.

It appears from the above determinations that bread in being heated to 150° loses in weight only a little over half of one per cent more than the same heated to 100°, although when kept at this temperature for an hour a slice half an inch thick is fully converted into light-colored toast like No. 2 of the table; such as would ordinarily be considered "just the thing" for persons of delicate digestion. Yet the determination of the soluble matter shows that it has not sensibly increased over that in the raw bread.

The brown toast made at 170° shows a sudden large increase of soluble matter, more than doubling that obtained at 150°. But there is at the same time a notable decrease in the amount of soluble nitrogenous matter as compared with the extract from the raw bread.

The latter fact is in agreement with the results obtained by Snyder, who, as above stated, found the digestibility of the protein decreased in the toast as compared with the bread. The greater water-solubility of the carbohydrates in the "brown" toast is in full accord with Snyder's findings in respect to the more rapid solution of the carbohydrates in his digestion experiments, but this was evidently not due so much to the enzym employed as to the water-solubility brought about by toasting.

But toast as ordinarily made is only browned delicately on both sides, the toasting penetrating only to a very slight depth; ordinarily the two sides together will hardly exceed a millimeter in thickness, and when the toasting is carried only to the delicate yellow preferred by connoisseurs, the increase in soluble matter will be insignificant, and the soft interior of the slice will be no more sterilized than it was in the baking. Thus neither increased solubility of the carbohydrates, nor sterilization, can explain the remarkable fact that such toast is nevertheless easier of digestion by invalids than the raw bread from which it was made.

In view of these results, as far as they go, it would seem improbable that the beneficial effect of toasting of bread is in the main due either to increase of soluble ingredients, or to sterilization. When the toasting reaches only the yellow tint, no such increase takes place; and even when the surfaces are toasted brown, the increase of solubility (2 to 3 per cent) will hardly serve to explain the decided benefit arising therefrom to the dyspeptic.

Without pretending that the experiments made offer more than a probable indication of the really effective conditions, they point to the conclusion holding in so many cases of dietetic anomalies, viz., that not solubility, but the effect of the *flavor* produced by the toasting, is the true cause of the readier digestion of toast as compared with bread. The nervous stimulus created by minute amounts of flavors or odors is potent in so many cases that examples need hardly be quoted; unless it be the marked effect of the "soupçon" of certain flavors which only the accomplished "chef" knows how to create, and which in a measure justify the extravagant salaries paid such men by those whose palate and digestion are equally delicate, and who can digest a meal only by their aid.

INVESTIGATION OF THE SEEDS OF POLYGALA APOPETALA.

By E. W. HILGARD.

The seeds of this plant, which is a native of the lower peninsula of California, were sent to the Station for investigation by Dr. F. Franceschi, of Santa Barbara. It seems to grow profusely in its native habitat, and is there supposed to possess important medicinal properties. These seeds are of a flattened, rounded-angular shape, about three sixteenths of an inch wide and scant one sixteenth of an inch in thickness; the oily kernel is covered by a rather thick, grayish-brown integument, which separates readily. When chewed the seed has an intensely acrid taste, which at once recalls that of the horse-chestnut or buckeye nut, as well as that of the close relative of this plant, the Seneca snakeroot (*Polygala senega*). It proves, in fact, to contain the same active compound, senegin, or more properly saponin (also called polygalic acid), which is also present in its root about to the same extent as in the Seneca root. Of this substance the kernel proved to contain 9.7 per cent, therefore considerably more than the Seneca snakeroot, which it could doubtless replace in medicinal use.

The kernel being obviously rich in oil, the latter was extracted in order to test its quality and quantity. It proves to be one of the richest oil seeds known, containing over 56 per cent of fat, a pale yellow, pleasantly flavored, liquid oil, much like olive oil, and like the latter, non-drying. As the plant is apparently easily grown and bears a heavy crop of seed, it might under certain conditions be made available as an oil plant. It is a woody perennial, with long-lanceolate leaves, grows from 2 to 3 feet in height, and has showy pink flowers.

ANALYSIS OF THE SEEDS.

By George E. Colby.

Number per pound.....	3,000
Kernels.....	85%
Shells.....	15%

Composition of the Kernels of the Seeds.

	Per Ct.
Water.....	5.3
Protein.....	21.9
Fat (oil).....	56.5
Carbohydrates (mostly fiber).....	4.4
Ash.....	2.2
Saponin (Polygalic acid).....	9.7
Total.....	100.0

Examination of the Air-dried Roots.

	Per Ct.
Watery extract) Saponin.....	3.00
) Sugar, gum, etc.	14.00
Insoluble matter (fiber, starch, etc.).....	83.00
Total.....	100.00

The oil extracted by means of ether, proved to have a strong taste of saponin. The cold-pressed oil was found to be of a lighter color than olive oil. Upon being washed with water, dried with calcium chlorid, and filtered, the taste of saponin disappears, and the oil is bland. With a view to determine its possible uses, its liquidity and drying quality were tested by the usual method of flow.

Comparison of liquidity and drying quality of the Polygala Oil with that of Olive Oil by flowing on a glass slab inclined one degree.

	$\frac{1}{4}$ cc. Polygala Oil.		$\frac{1}{4}$ cc. Olive Oil.	
	Inches Flow.	Remarks.	Inches Flow.	Remarks.
24 hours	14½	At 8 inches becomes steady, clean.	12	..... Steady stream.
48 hours	16	Track clear	14	..... Steady stream.
96 hours	20	Track fluid	18	..... Track fluid.
144 hours	21¾	Track fluid	19	..... Track fluid.
7 days	22½	Track fluid	20¼	..... Track fluid.
14 days	22½	Track fluid	20¼	..... Track fluid.

During the last week neither of the oils moved appreciably, the track in both cases remaining liquid to the touch.

From the above test it appears that the polygala oil is a more liquid and less *drying* oil than olive oil.

The high oil-content of this seed is analogous to that of its near relative, the *Polygala butyracea*, a native of the tropics and to some extent cultivated for its fatty matter in eastern Asia. In the publications of the Bureau of Agriculture and Commerce of Saigon, Indo-China, it is reported as yielding seed at the rate of about 250 pounds per acre, and from this seed about 30 per cent of a white, well-flavored fat, resembling lard, can be expressed by hydraulic pressure.

According to these data it does not seem likely that either of the two species will be grown with profit for their oil or fat, unless the latter should be shown to possess some special merits or uses not now known.

ENTOMOLOGY.

By C. W. WOODWORTH.

Previous to the time covered by the present report (1901-1903) the funds of the Station have not permitted the undertaking of serious outside investigations, and they are possible now chiefly through the granting of funds by various counties for special inquiries.

Ten bulletins have been published during this period. The first of these, Bulletin No. 135, on the *potato-worm*, represents the work of a student, now assistant in the department, Mr. W. T. Clarke. The potato-worm has been highly injurious to potato-growers, who, because of lack of knowledge of the insect, have often followed practices which favored the development of the worm in the tubers. Mr. Clarke's observations and experiments have resulted in a very material reduction of the loss in many cases where his recommendations have been followed.

The second publication, Bulletin No. 139, on *Orange and Lemon Rot*, was issued in response to requests for information relative to the cause of very serious losses in transit by shippers of citrus fruits. It would seem wise to undertake a careful study of the conditions of fruit in transit, since the losses should be largely preventable. The appointment of a plant pathologist now finally relieves this department of the work upon fungi and bacteria, which has heretofore been partly carried, pending its being better provided for.

The most elaborate study made during 1902 was in coöperation with the orchardists of Placer County, under an appropriation by the Board of Supervisors, to provide for the expenses incurred. Mr. W. T. Clarke was detailed for this investigation and took up his residence at Newcastle the second of January, spending some seven months in the field. He was able to accomplish a notable piece of work. The saving in that county alone during the past season, we think, has easily been large enough to pay for the continuance of this kind of work for a hundred years, and the good effects will not stop here; but the peach-growers of that region feel that now they have the mastery of the *peach-worm*, an insect whose injury the past four years has amounted to over \$300,000 a year. The clue to the solution of this problem was discovered as early as February of the present year and published at that time in a press bulletin. It yet remained to be demonstrated by actual field work that a correct timing of the treatment, which was the essential element of Mr. Clarke's discovery, would result in a sufficient decrease in the injury produced by the insect. This he was able to amply establish, by convincing the peach-growers of Placer County of the soundness of his deductions, so that a large majority of them followed closely his directions. The great saving obtained in that region this year was thus brought about. There is no doubt, judging by the returns of non-sprayed orchards, that the season was more than usually favorable to the peach-worm, and that therefore the results obtained by spraying,

amounting in some cases to a reduction of the loss to below one per cent, can be duplicated in the coming years.

The history of the discovery of the means of control of this insect is as follows: The first significant observations, I believe, were made known by Mr. Stabler, of Yuba City. He reported that when spraying was done for San José scale the peach-worm almost disappeared. This suggestion has been used for many years in Placer County and in other parts of the State, sometimes with good results and sometimes with apparently no results. The next contribution to the economic knowledge of the insect was Mr. Ehrhorn's very important discovery in regard to the winter habits of the worms. This discovery explained the reason for the efficiency of the lime, salt, and sulfur application, as reported by Mr. Stabler, but did not explain the failure of this treatment, which occurred more often than its apparent success. Mr. Clarke's contribution consists in the demonstration of the impossibility of penetrating the winter burrow, on account of the very perfect protective character of the silken lining; and after working out very carefully the spring habits of the worm he discovered the vulnerable point at which it could be successfully attacked. The results of this work are presented in Bulletin No. 144.

The next piece of work undertaken was an investigation of the *peach-tree borer*, at the instance of Mr. Ehrhorn, and with his very kind assistance and coöperation. Observations were made by myself and by Professor Washburn, formerly of Oregon, now of Minnesota, but more urgent matters demanded the attention of the department, so that the work was not carried to the point desired. The practical conclusions reached, however, seemed of enough importance to publish, and may be found in Bulletin No. 143. The use of carbon bisulfid for this insect is a remarkably cheap and efficient method of treatment, and while much experimental work remains to be done and should be provided for in the near future, enough has been learned to enable the grower to avoid the danger to the tree, which has stood in the way of many who would have otherwise adopted this insecticide. The all-important point brought out by this study was that the character of the soil, whether loose or heavy, wet or dry, was the chief factor to be considered in the use of this chemical. The same dose might result in one case in the death of the tree, and in another be insufficient to kill the borer. Between these two extremes of soil condition there is a very wide range, in which the results are all that can be desired. It is our belief, that intelligently applied, carbon bisulfid can be used with the best of results under all conditions in which the trees are grown.

A beginning was made in the study of the *red spiders* of the State. Mr. W. H. Volck, a student in the department, was appointed an inspector by the Los Angeles Board of Horticultural Commissioners, and has conducted most of the experiments, working under my direction. We have been able to clear up the life history of this creature in a very satisfactory manner and to make positive recommendations as to the time for spraying. Perhaps the most valuable part of the practical conclusions arrived at has been the comparison of the various insecticides, to determine which is most effective and economical. A portion of the results were given in Bulletin No. 145, and others in Bulletin No. 154, referred to again below. The species studied, *Tetranychus mytilaspidis*, attacking citrus trees, is by no means the most injurious one

in the State, but had caused a great deal of apprehension among orange-growers. The *Bryobia*, on almonds and other deciduous fruits, does much more injury and is in need of just such a study, in order that the remedial measures may be intelligently applied. This group of fruit pests is of such importance in this State that it is high time a beginning should be made in their study. The extremely minute size of these creatures renders this work exceptionally difficult, as everything must be done under a microscope and with the most delicate manipulations. Mr. Volck has done very persistent, painstaking work and is exceptionally resourceful.

The most notable entomological occurrence of the year was the outbreak of *grasshoppers* over a wide area of country, but particularly in Sacramento, Fresno, and Tulare counties. The injury produced was not as heavy as has occurred in these same regions in former years, but in the aggregate amounted to a great deal. The newspaper accounts of this grasshopper invasion were decidedly sensational, and gave undue prominence to the fact that the cultivated lands of this State are subject to migratory locusts. That such is the fact every one acquainted with these insects is well aware. Arid uplands are always the breeding-grounds of migratory locusts. The locust breeding-grounds in this State are really not extensive, and we are protected by high mountains from the great plateau regions to the east. The problem of grasshopper control is, therefore, by no means as difficult here as in most of the regions subject to this pest. Indeed the possibility of complete control on the breeding-ground, whereby our orchards and vineyards might entirely escape injury, is shown and discussed in our Bulletin No. 142. The efficiency of arsenic-bran mixture, under certain conditions, was again demonstrated this year, being used on a large scale in each of the districts where much injury was done. Here, as in the case of the peach-worm investigation, it was found necessary to go into the field and actually demonstrate the methods of procedure, in order to secure the best results. It should be considered an important part of the work of economic entomologists to put their work into actual practice. No matter how many useful facts may be learned about insects, unless the growers can be made to believe in them and to use them to the saving of their crops, the study falls short of the real end for which it was made.

Since the beginning of the fumigation season we have had Mr. Hunter in the field measuring tents, in order to determine the actual dose in use in this State. The measurements he has brought back show a great need of improvements in the method of estimating the amount of chemicals to be employed. The need of greater knowledge of the facts involved in our farming operations is brought out with peculiar force in this case. There is expended each season in this operation of fumigating orange trees in this State upward of \$400,000, and the determination of the amount of chemicals used in each case is wholly a matter of guesswork. We had supposed that the judgment of those engaged in this work had become so developed that they could make fairly accurate estimates of the size of a tree, but, after following the work of nearly every fumigator engaged in treating orange trees this season, we failed to find a single individual who would not vary the dose to the extent of giving the same size tree twice as much gas in one instance as he did in another. It would seem to be a physical impossibility to accurately guess the size of a tree. The results obtained have just been published as Bulletin

No. 152, and a plan presented for the rapid measurement and accurate calculation of the content of fumigation tents, which should result in securing more uniformity and efficiency, and possibly a material reduction in the cost of fumigation.

The study of the *distillates* of the California petroleum as spraying material has been carried on for some time. There is no doubt that this material will prove to be of very good service as an insecticide. Already it occupies an important place as a scale-insect destroyer. As compared with kerosene oil its efficiency is proven to be decidedly greater. The difficulty that has stood in the way of its more extensive use has been the lack of uniformity of the product and, therefore, the unreliability of the result, particularly with reference to the injury to the plant. Our investigations have been directed toward establishing criteria for the economic classification of oils and distillates and the determination of the fundamental facts in reference to the cause and injury. In the first part of this study I have had the coöperation of Mr. Colby in the chemical work, and in the plant pathology problems I have been assisted by Mr. Volck, in connection with his work on the red spider in southern California. The discussion of the nature of the injury produced by distillates, especially as related to the application of these products to citrus trees, is given in Bulletin No. 153. We hope soon to be able to do some more work on the effect of crude oils and distillates upon the bark of deciduous trees, since it appears to present problems quite different in their nature.

The most important investigation of this department the present season is located in the Pajaro Valley, where, according to the estimates made by the orchardists of that region, the losses this last season from the work of the *codling-moth* have amounted to over \$500,000. For this work the Supervisors of Santa Cruz and Monterey counties have appropriated \$2,750, which they have placed in our hands for the study of the pest. The work is under the immediate charge of our Field Entomologist, Mr. Clarke, and we are using some of the entomological students as special assistants. These are Mr. J. S. Hunter, Mr. Wm. Kirkman, and Mr. M. B. Mitsmain. Already the results obtained are very satisfactory, but will not be ready for publication for some time.

In other parts of the State this same insect eats up a large part of the profits of apple and pear growing, and its habits differ so much in each locality that several separate investigations will have to be made before we shall have sufficient knowledge to intelligently combat the insect and rid our markets of wormy fruit. In all this work we have the hearty coöperation of our colleagues on the Station staff, particularly Mr. Colby, who is investigating the chemical problems that arise. His Bulletin No. 151, just issued, on *Arsenical Insecticides*, represents some of the work along this line.

The most recent coöperative work is the study of the *red spider* of the *almond* and other deciduous trees, provided for by the Sutter County Board of Horticultural Commissioners. This enabled Mr. Volck to test under northern conditions the method developed in southern California for the destruction of mites. Bulletin No. 154 presents the results obtained, which were highly satisfactory. The mite attacking the hops has been under observation for some time at Wheatland, and the work will be continued, being provided for by public-spirited growers.

The study of the *mosquito and its destruction* has demanded some attention, and has been provided for by the Civic Improvement Club of San Rafael. Only a beginning has been made, however, owing to the press of other matters that have demanded the time of the entomologist and available student assistants.

The appointment of Mr. H. J. Quayle as assistant to aid in the instruction work in entomology will enable the entomologist to give more attention to the Station work in the future.

SUMMARY OF BULLETINS ISSUED.

GRASSHOPPERS IN CALIFORNIA.

(Bulletin No. 142.)

This bulletin, by C. W. Woodworth, covers 36 pages and is well illustrated. It was issued in August, 1902. The following is a brief summary:

As grasshoppers were present in considerable numbers over a large area of the State during the last summer, the Department of Entomology was called upon to undertake the supervision of work of destruction in a few districts; burning the infested areas had been previously tried, with some quite serious losses from the fire getting beyond control, and the use of hopper-dozers was advised by the department as being quite as effective and without danger. Work in the field was greatly hampered by legal technicalities, and the need for adequate laws to deal with the hoppers in years when they are really highly injurious was made very apparent.

The department advises that means be provided "for obtaining facts relative to the location of breeding grounds and habits of the various species of locusts; the securing each year of enough information to allow the use of the most economical means for the destruction of the hoppers, and for provision for compensating those whose property it may be necessary to injure in the work; and careful and competent supervision of every general effort that communities may desire to make for their protection."

It was ascertained that during the season at least half a dozen different kinds of locusts did injury in some part of the State, and the bulletin gives a short study of these with illustrations to enable the farmer or student to recognize the species. A brief history of grasshopper invasions of California is given, together with something of the life history of the injurious species and the various remedies to be employed in controlling breeding-grounds, flying and drifting swarms, and a plan for State action in the matter.

THE CALIFORNIA PEACH-TREE BORER.

(Bulletin No. 143.)

This bulletin, prepared by C. W. Woodworth, and covering 16 pages with numerous illustrations, was issued in September, 1902. The following is a brief summary:

While the peach-tree borer is at present injurious only in the Santa Clara Valley, a watch should be kept for it elsewhere.

As far as known we have but one brood a year, but worms in all conditions can be found at almost any season, and moths fly and lay eggs all summer.

The presence of the gum can not be depended upon as an indication of the young worm, so that it is difficult to get all when digging them out.

Carbon bisulfid has proven a most efficient method of killing the worms.

The use of carbon bisulfid is not without danger to the tree, but with proper caution is safe.

The condition of the soil is the most important item to consider in the use of carbon bisulfid.

The soil next to the tree must be loose enough to allow the gas to reach every part of the crown, in order to kill all the worms.

Uniform treatment as to dose should be attended to. The time for the most important treatment is in the early winter. Probably, in addition, a midsummer treatment would be nearly as useful.

THE PEACH-WORM.

(Bulletin No. 144.)

A bulletin on the peach-worm, covering 44 pages and well illustrated, was prepared by Warren T. Clarke, Assistant Entomologist of the department, and was issued in September, 1902. The following is a brief summary:

Probably the most serious peach pest in California is the peach-worm, which also attacks plums and apricots, the loss in four years from this source amounting to over a million dollars.

This bulletin, which is the result of many months' study and investigation in the worst infested district of the State, gives in minute detail the results of investigation into the life history of the insect, covering its winter conditions and work, including the hibernating larvæ, parasitism, distribution of worms in the orchard, and experiments toward controlling it at this time, such as pruning and spraying; spring conditions, the pupæ, moths, and egg laying; and the fall history.

Various sprays were experimented with, and the conclusion drawn from these that the worm can be controlled by the use of the lime, salt, and sulfur compound, if it is prepared in the proper manner and applied at the right time. The recipe for compounding the mixture and explicit directions for applying it are given.

THE RED SPIDER OF CITRUS TREES.

(Bulletin No. 145.)

This bulletin was prepared by C. W. Woodworth and issued in November, 1902. It covers 20 pages, and is illustrated. The following is a brief summary:

The red spider of citrus trees, *Tetranychus mytilaspidis*, does not produce the spotting of the fruit usually credited to it, but does cause dropping, and also injures the leaves. The eggs, which are very peculiar, may be found abundantly on the leaves and to some extent on the fruit. They hatch after a week or two, disclosing a six-legged mite, which after about two days, one of which is spent in feeding, changes its skin and becomes eight-legged. Two more molts occur, requiring five or six days each before the adult mite appears. It feeds on the leaf by making a slit, out of which it sucks the contents of the cells beneath. The male is very active and is found mostly on the older leaves. The female is much larger than the male, and lays a great many eggs.

The natural enemies most abundant are the ladybirds, the lacewing flies, the coniopteryx, and a number of species of mites. They do not accomplish much toward the checking of the red spider. A fungus was studied that may be the direct cause of the spring decrease of the mite, but the weather is the really important item.

Until we learn more about the reasons of the natural decrease of the red spider we will have to depend on the use of insecticides. Fumigation is of no value for this purpose. Sulfur is not as valuable as it is for the red spider of deciduous trees. Spraying is a difficult operation on dense trees like the orange, and is done best by spraying both from the inside and the outside. Distillates may prove to be the best material, but until we know better how to avoid injury to the tree, sulfid of potash is to be recommended.

ARSENICAL INSECTICIDES.

(Bulletin No. 151.)

This bulletin, by George E. Colby, issued in July, 1903, covers 33 pages, fully illustrated. It is called forth by the fact that at the present time there are used in the United States for horticultural purposes from 1,500 to 2,000 tons of paris green annually, and the enormous increase in the demand has caused manufacturers to put upon the market products which have been carelessly or hastily manufactured; and this department has undertaken extensive examination of paris green and other arsenical spraying compounds to determine their strength and purity.

This examination has shown that the market is fast growing to be in very fair condition as to the quality of the paris green found in it; more and more of this poison coming within the requirements of the law of California, governing the sale of paris green, enacted in 1901, and especially as regards those containing less than four percent of "white arsenic." Still there is much room for improvement as compared with the paris green on sale in New York State, where, according to the reports of that Experiment Station, all are satisfactory.

Adulteration in the sense of adding foreign matter, "make-weights," to paris green is rarely practiced in this country, at least by the manufacturers.

Few of the commercial substitutes are found to be passable as regards the water-soluble arsenic compounds in them; and for this reason and because they possess little advantage over paris green in remaining in suspension in water, they are not to be taken up indiscriminately by the farmer upon the word of the trade.

The insoluble arsenate and arsenite of lead and arsenite of calcium (home-made arsenicals) are to be recommended for extensive trial, especially the lead compounds, when heavy doses of poison are required, as they cost no more than paris green and are much easier to distribute evenly upon trees.

Packages should be sent to the Agricultural Department at Berkeley for examination, and growers, when purchasing, should see that a certificate from the Director, Prof. E. W. Hilgard, accompanies the material.

FUMIGATION DOSAGE.

(Bulletin No. 152.)

This bulletin, by C. W. Woodworth, was issued in July, 1903. It covers 17 pages with illustrations, and is the result of an extensive series of measurements to determine what the present actual fumigation practice is in the matter of dosage. For this purpose

J. S. Hunter was sent into the field and spent nearly two months visiting practically every fumigation outfit operating in the State, making measurements of the tented trees, and recording the doses assigned to them.

A striking difference in the practice of fumigators of the different counties was noticed, and no fumigator was found who could make accurate estimates of the volume of a tent, showing that uniform results require that actual measurements be made. All fumigators agree in giving large trees a relatively heavier dose than a small tree receives per unit of volume.

The rate of leakage, which has not heretofore been taken into consideration in planning schemes of fumigation dosage, was shown to be very large, and affords some reason for the larger dosage of small trees.

The calculation of the reaction in the generation of the gas shows that the proportions of cyanide and acid commonly used are correct. A system of dosage based on the average of the measurements, and with a ratio approaching the actual practice, is proposed; and finally—a scheme is presented for marking fumigation tents so as to insure accurate dosage.

SPRAYING WITH DISTILLATES.

(Bulletin No. 153.)

This bulletin, covering 31 pages, with illustrations, was issued in June, 1903, by W. H. Volck, and embodies the results of investigations made in southern California, as to the cause of the spotting of oranges; the conclusion being that spraying with distillates has probably caused more loss by spotting than any other one thing.

The bulletin gives in detail the composition and use of distillates, with directions for emulsifying them, and an analysis of various "gas distillates" on the market.

The penetration of oils into the plant was made the subject of much experiment, and a number of illustrations are given of the structure of the leaves and the manner of the entrance of the oil with the resulting damage; various conditions were found to affect the amount of injury to the plants, such as the quantity of oil used, the character of the oil, mixed oils, etc., and the injuries were of both a mechanical and chemical nature.

The author makes a number of practical suggestions for the use of oils in killing the black scale and red spider, and says that it was found necessary, in order to avoid serious injury to the trees, to dilute the sprays so much that the hardier and more protected stages of the various scale insects survived in sufficiently large numbers to quickly and completely reinfest the tree, if the treatment stopped with one application.

Owing to this fact it was necessary to repeat the spraying two or three times, allowing some months between applications.

There are times of the year and manners of application which make it possible to spray with distillates without the injury to the tree being serious, and the bulletin concludes with minute directions for applying the spray to produce the best results with the least possible amount of injury to foliage and fruit.

SULFUR SPRAYS FOR RED SPIDERS.

(Bulletin No. 154.)

This bulletin, by W. H. Volck, was issued in June, 1903, and covers 12 pages. It is based on results obtained in the cooperative investigations of the Los Angeles County and Sutter County Boards of Horticultural Commissioners, and the Entomological Department of the Station. The formulæ for sulfur sprays now offered seem to meet all the requirements for the successful control of red spiders on both citrus and deciduous trees. The following is a summary of the bulletin:

The old idea that sulfur is a good remedy for mites is fully supported by recent experiments.

Dry sulfur is usually successful as a method of partial control.

Sulfur spraying has been found many times more efficient than other methods of application and is perfectly successful where dry sulfuring has failed.

The efficiency of the sulfur spray has been demonstrated for the red spider of the orange (*Tetranychus mytilaspidis*) in southern California, and for the almond *Bryobia* in Sutter County.

VITICULTURE.

By E. H. TWIGHT.

During the last two seasons new work has been started to determine the adaptation of phylloxera-resistant stocks to the different soils of California. At Fresno, five experimental plots have been established, as follows: at the Fresno vineyard, Eisen vineyard, Scandinavian Colony winery, Eggers's vineyard, and Kearney vineyard. The lack of funds prevented the establishing of plots in other districts, but during the coming season new plots will be started in Santa Clara Valley, Sonoma Valley, Sacramento Valley, and the Foothills of the Sierra.

This spring the U. S. Department of Agriculture started two plots at Fresno and Napa, that will be run in coöperation with the Experiment Station at Berkeley; they will also be used to determine questions of adaptation, but mainly for testing the affinity of *Vinifera* scions to resistant stocks.

A great many samples of diseased vines and other plants have been received during the past year, and a list of some of the samples examined is given below.

The work of studying the *native yeasts* found on California grapes has been kept up and some interesting data have been obtained regarding the adaptation of yeasts to new conditions. The lack of proper apparatus for multiplying pure cultures has been a great drawback; possibly this year the Station will be able to obtain a yeast-multiplying machine, which may help to furnish commercial results. There should be a great demand for pure yeasts, not only in the wine-making industry, but also in distilling and in the making of fruit wines and vinegars.

The vineyards throughout California are in fair condition, but the *phylloxera* is spreading steadily, and the growers ought to see how injudicious, not to say useless, it is to plant vineyards of *Vinifera* varieties on their own roots in affected districts; yet this is being done in Sonoma, Napa, Sacramento, and San Joaquin valleys, even when the vineyards all around are dead or dying.

Grafting on resistant stock is the only practical and permanent remedy; and it has proved such a success all through the world that vineyardists ought to have more confidence in this method. It is true that many failures can be found in California, but we can generally trace the cause of these to the bad choice of the stock and the bad cultivation of the land before planting. This, together with frequently defective grafting, is enough to prevent the vineyard from giving favorable results. We have many instances of splendid returns obtained in grafting on resistant stock, wherever the proper choice and attention have been given. The yield is at least as heavy, and the vines bear just as soon as on their own roots, sometimes sooner.

The *Anaheim disease* is at the present time one of the most serious problems to be met by the vineyardist, and it is to be hoped that more

attention will be given to that disease than has been given to phylloxera. In southern California the disease is spreading slowly up the San Bernardino Valley; while in northern California Prof. N. B. Pierce located it in the upper Sacramento Valley several years ago, and it seems to-day pretty certain that the same disease is partly the cause of the destruction of the vineyards in Santa Clara County. With three such centers of infection the greatest care should be given in the future to prevent the spread of the dreaded disease. The first thing is to be warned against planting cuttings from infected districts, and unfortunately this reckless planting has been done a good deal in southern California, and probably also in the north. The next thing would be to carry on investigations as regards the possible finding of stocks that are resistant to the disease. Prof. N. B. Pierce has been carrying on for years investigations in that line, and anything that could help him toward the solution of the problem ought certainly to be done, as this is of the most vital importance to the grape industry of the State.

The small appropriation that has been allowed the viticultural department at the last meeting of the Legislature will not enable it to carry on all of these investigations; and it is to be hoped that enough local interest may be awakened to help along the lines for which adequate provision has not been made.

SPECIMENS RECEIVED FOR EXAMINATION.

Specimen.	Locality.	County.	Sender.
Vines, dying.....	Suñol Glen	Alameda	Thomas L. Leach
Vine, diseased.....	Alameda	Alameda	M. Joost & Sons
Vine for phylloxera.....	Irvington	Alameda	Grau & Werner
Vine for phylloxera.....	Fresno	Fresno	A. Henningson
Grafted cuttings.....	Fresno	Fresno	E. J. Baber
Vine roots for phylloxera.....	Fresno	Fresno	W. W. Hanger
Vines, not determined.....	Fresno	Fresno	A. L. Sayre
Apricots, shothole fungus.....	Kingsbury	Fresno	Erick Peterson
Vines, affected by alkali.....	Oleander	Fresno	H. W. Wrightson
Diseased Riparia.....	Oleander	Fresno	H. W. Wrightson
Vine roots and stem.....	Selma	Fresno	Mrs. G. Krich
Vine roots and grapes for oidium.....	Malaga	Fresno	G. F. Bodfish
Trees with blight.....	Lemoore	Kings	E. G. Meyer
Mildewed vines.....	Wiseburn	Los Angeles	G. C. Noble
Tomatoes for blight.....	Los Angeles	Los Angeles	W. A. Choate
Vine leaves.....	Pasadena	Los Angeles	A. G. Dedual
Claret containing "La Pousse".....	Napa	Napa	G. Migliavacca
"Rose of Peru," for phylloxera.....	Rocklin	Placer	H. E. Miller
Vines, erinose.....	Mills	Sacramento	W. H. Williamson
Cuttings, nematode worms.....	Fairoaks Bridge.....	Sacramento	M. C. Pike
Rooted cuttings, Sultana.....	Ontario	San Bernardino.....	Experiment Station
Grape cuttings.....	Ontario	San Bernardino.....	Experiment Station
Apricots, shothole fungus.....	Ontario	San Bernardino.....	Experiment Station
Vine for fungus.....	Etiwanda	San Bernardino.....	H. C. Humphrey
Vine roots for phylloxera.....	Lodi	San Joaquin	George Hogan
Mission grape.....	Lodi	San Joaquin	Leon Villinger
Cuttings and moth.....	Stockton	San Joaquin	C. W. Norton
Vine root for phylloxera.....	San Francisco.....	San Francisco.....	E. Bianchi
Vine roots for phylloxera.....	San Francisco.....	San Francisco.....	E. Blanckenburg
Tomatoes for fungus.....	San Francisco.....	San Francisco.....	F. E. Berier
Vines for determination.....	San Francisco.....	San Francisco.....	C. F. Leitz
Cuttings with fungus.....	Menlo Park	San Mateo	John T. Doyle
Cuttings with fungus.....	Menlo Park	San Mateo	John T. Doyle
Grafts of resistant stock.....	Los Gatos	Santa Clara	A. Zimmermann
Vine for determination.....	Los Gatos	Santa Clara	James C. Strong
Vine leaf, erinose.....	Los Gatos	Santa Clara	Noah G. Rodgers
Hollyhock for "Puccinia mal- vacearum".....	Campbell.....	Santa Clara	Miss M. E. Moulton
Vine roots for phylloxera.....	Gilroy	Santa Clara	Hugh Sherlock
Vine.....	Watsonville	Santa Cruz	H. F. Spetzen
Vines, unknown fungus.....	Geyserville	Sonoma	Fred Glaser

Specimen.	Locality.	County.	Sender.
Vines, Ancomycetes fungus.....	Santa Rosa.....	Sonoma.....	P. W. Russman
Vines.....	Sebastopol.....	Sonoma.....	Albert Gaye
Grape leaves for fungus.....	Sebastopol.....	Sonoma.....	E. L. Hathaway
Cuttings, mold.....	Sebastopol.....	Sonoma.....	J. Jacquard
Grapes for fungus.....	Santa Rosa.....	Sonoma.....	S. P. Coulter
Vine, fungous disease.....	Healdsburg.....	Sonoma.....	A. J. Galloway
Vine, diseased.....	Yuba City.....	Sutter.....	Fred H. Roberts
Grapes, oidium.....	Tulare.....	Tulare.....	D. J. S. Montgomery
Vine leaf, erinose.....	Woodland.....	Yolo.....	C. W. Bush
Vines, root knot.....	Bernalillo.....	New Mexico.....	Brother James, F. S. C.
Caseinate for wines.....	New York.....	New York.....	Casein Co. of America

SUMMARY OF BULLETINS ISSUED.

NEW METHODS OF GRAFTING AND BUDDING VINES.

(Bulletin No. 146.)

This bulletin, prepared by E. H. Twight, was issued in November, 1902, and covers 13 pages. It is an endeavor to introduce the new processes of grafting and budding vines, now successfully practiced in Europe, to the attention of California vine-growers. Details and illustrations are given of Green Cleft grafts; Horwath, Salgues, Besson, Clarac, Massabie, and Vouzon grafts. In addition to these, careful directions as to the means of insuring the success of these herbaceous grafts are given, including in detail the selection of shoots bearing buds for scions; preparation of scion-buds; making the slit on the stock; ligatures; arrangement of mother stock, and gathering and keeping the budded cuttings.

RESISTANT VINES AND THEIR HYBRIDS.

(Bulletin No. 148.)

This bulletin was issued in October, 1902, and covers 13 pages. The following is a summary:

The most satisfactory method of combating phylloxera is the use of resistant vines, because it is applicable to all conditions and is the most economical in the end. A resistant vine is one which is capable of keeping alive and growing even when phylloxera are living upon its roots. The degree of resistance necessary for the production of good crops varies with the character of the soil, and the object of this bulletin is to point out the various conditions affecting the adaptation of the resistant vines, among which the amount of lime in the soil, degree of compactness, moisture, and fertility of the land are the most important factors.

The different varieties of resistant vines and their hybrids are described and illustrated and the particular conditions which are necessary to the adaptation and successful resistance of each is clearly stated.

VETERINARY SCIENCE AND BACTERIOLOGY.

By ARCHIBALD R. WARD.

During the term of the writer's connection with the Experiment Station, the conducting of extensive research work has not been possible. Upon several occasions communities have suffered extensive losses from infectious diseases and have requested aid from the Station. As hereinafter stated there have been several outbreaks of infectious diseases, the precise nature of which the writer has determined by post-mortem examinations. Advice concerning the methods of control has been in each case thoroughly disseminated through the medium of local newspapers.

Hog Cholera at Red Bluff.—During the season of 1901, exceptionally severe losses from swine diseases occurred in the Sacramento Valley. Some uncertainty existed among the hog owners concerning the nature of the disease, and in compliance with a request from interested persons in Red Bluff, the writer spent a day in the field to determine the nature of the disease.

Two pigs were available for a careful post-mortem examination. Following is a technical description of the lesions observed:

FIG 1. Four months old, male, recently dead. Skin on inner surface of thighs is colored purple. The cephalic lobe of the lung is consolidated, as is also the anterior portion of the principal lobe of the right lung, which latter also shows hemorrhagic areas. The pleuræ exhibit spots of fibrinous exudate and numerous punctiform hemorrhages. The right auricle and aorta show hemorrhages, likewise the fat adhering to the auricles.

Hemorrhagic areas are noticeable on the fundus of the stomach, peritoneum, omentum, cæcum, and kidneys. The spleen is darkened in color and slightly enlarged. Some of the mesenteric lymphatic glands are engorged with blood, as well as the sublumbar lymphatics. The omentum near the pylorus is oedematous. The liver has an abnormal dark-purplish color. A few punctiform hemorrhages are observed in the cortex of the kidney.

The cardiac portion of the mucosa of the stomach and the mucosa about the fundus are studded with confluent hemorrhagic areas. The pyloric portion shows a few hemorrhages. The small intestines are empty, as is also the cæcum. Punctiform hemorrhages are observed in the mucosa of the cæcum, as well as in the mucosa of the large intestine throughout its whole extent.

Hemorrhagic areas are noticed in the subcutaneous fascia of the thighs, and the submaxillary lymphatic glands are hemorrhagic. The muscular tissues in general do not show hemorrhagic lesions.

Agar and bouillon cultures were inoculated from liver, spleen, and heart blood.

FIG 2. Three months old. Emaciated, with glassy eyes and staggering gait. Shot for examination.

The ventral and azygous lobes show the lesions of broncho pneumonia. The bronchi are plugged with white masses of a cheesy consistency. A few hemorrhagic areas only are noted on the pulmonary pleura. The liver shows punctiform hemorrhages, and the mesenteric lymphatic glands are engorged with blood. Punctiform hemorrhages are not numerous on the peritoneum.

The stomach and small intestines are normal. The mucosa of the large intestines and cæcum are studded with numerous necrotic areas colored black and yellow mixed. The location of many of the ulcers is marked on the plural surface of the intestine by hemorrhagic areas.

Cultures in agar and bouillon were inoculated from liver and spleen.

The media inoculated from the organs of the two pigs during the post-mortem examination developed very largely pure cultures of *Bacillus cholerae suis*, the hog cholera bacillus.

My conclusion that the hogs were dying of hog cholera* was announced to a considerable company of hog owners at a meeting in Red Bluff. The infectious nature of the disease was explained and the various common means of its spread were pointed out. Particular emphasis was laid upon the necessity for the exercise of rigid quarantine measures to restrict the further spread of the disease.

Texas Fever in Orange County.—The existence of a cattle disease known as Bloody Murrain, in the vicinity of Santa Ana and Westminster is a serious hindrance to the prosperity of the dairy business in that locality. The most noticeable and constantly present symptom is the voiding of bloody-colored urine, but in some cases this may not be noticed; sometimes the dung is mixed with blood. The affected animals become gradually weaker and die within a period varying from a few hours after the affection is noticed up to a week or more. In some cases the shrinkage in milk, due to fever, may be first noticed at the night's milking, and the animal may be found dead in the morning. None but cattle are said to be affected, and it is claimed that hogs are not injured by eating the carcasses of animals dead of the disease.

The symptoms reported are those of Texas fever, with the possible exception that the animals have died somewhat more suddenly than the published facts regarding the duration of this disease would lead one to expect. Hence some stock owners have been inclined to believe that there exists a second cattle disease in the locality, which kills in a very short time, very much as does anthrax. As near as can be gathered from conversation with interested cattle owners, it is merely this fact of the rapidity of the death of the animals that has led them to suspect that the disease is anthrax.

In response to a request from interested dairymen, the writer spent some time in Westminster during August, 1901, in an attempt to observe a case of the disease. No outbreaks in the vicinity came to my notice, and after a week it became necessary to turn attention to other work. In February, 1902, information was received of the sickness of several animals in Bolsa. The outbreak was investigated, but there were available for examination only two cows that had been buried forty-eight hours. At the post-mortem examination appearances strongly suggestive of Texas fever were observed, but the decomposed condition of the carcasses rendered the examination quite unsatisfactory.

While in Tustin in September, 1902, the attention of the writer was called to a case of the unknown cattle disease. When first seen the animal was alive and showed the symptoms of Texas fever, which diagnosis was verified by post-mortem and microscopic examinations.†

Cover-glass preparations made from samples of blood, liver, and spleen, when prepared by the method described by Smith,‡ showed the Texas fever blood parasites.

*The Agricultural Experiment Station has published a circular on Hog Cholera, which may be obtained on application.

†For the use of laboratory apparatus the writer is indebted to Newton B. Pierce, in charge of the Pacific Coast Laboratory of the Division of Vegetable Physiology and Pathology, U. S. Department of Agriculture.

‡Theobald Smith. Bulletin No. 1, Bureau of Animal Industry, U. S. Department of Agriculture, page 43.

While at Westminster the next day the writer had the good fortune to make a post-mortem examination of an animal that had died within twelve hours after the disease was first noticed by the owner. Consequently this case was a good type of the unknown (?) rapidly-fatal cattle disease. Work with the microscope in Mr. Pierce's laboratory proved that this case too was Texas fever, as well as the first.

Therefore the writer concludes in regard to the matter that the stock owners are not justified in calling the prevalent disease anthrax, merely on the basis of the rapidity with which the animals die.

Dairymen in Orange County have argued that the disease in their locality is not Texas fever, on the ground that the "fever" cattle tick does not infest the cattle in the region. This is an erroneous assumption, for the writer has observed ticks just over the line in Los Angeles County; a fact which, in the absence of quarantine regulations, is sufficient to explain the frequent outbreaks of Texas fever in the region.*

Pathological Examinations.—The attempt to diagnose infectious diseases of animals by the examination of portions of dead animals sent by mail or express is unsatisfactory. The usefulness of such a method is limited to a few diseases; and besides, pathological material usually arrives in a badly decomposed condition. On several occasions samples from the spleen and blood have been sent in from animals supposed to have died from anthrax. In each case it was impossible to detect the presence of anthrax bacilli by microscopic examination, a fact necessary to confirm a diagnosis of anthrax.

Texas fever, blackleg, tuberculosis, and swine plague have been recognized by material sent for pathological examination.

Ropy or Slimy Milk.—Some trouble has occurred in milk sold in San Francisco, by reason of its becoming slimy or viscid. After standing several hours the cream would become slimy or ropy, a condition that renders the milk objectionable to the consumer. Such defective milk when touched with a spoon or fork would adhere to it and "string out" in a fine thread. Earlier investigations† of the writer have shown that this condition is brought about by bacteria which sometimes are found naturally in water, and which occasionally gain access to milk.

A dairyman in Marin County experienced difficulty on account of complaints from consumers that the milk became slimy. Upon request, the writer visited the dairies and took samples of milk, determining the specific gravity and per cent of fat. Later, the depot of the retailer in San Francisco was visited where there were collected samples of milk said to have come from the same dairies. The specific gravity and fat per cent of these last samples indicated that the milk had been adulterated with water.

Inasmuch as the germs of slimy milk occur in water, it was not deemed advisable to search longer for a probable source of the origin of the trouble from ropy milk.

*The essential facts concerning Texas fever and the relation of ticks to its spread are contained in a circular published by the Agricultural Experiment Station, and may be obtained upon application.

†Bulletins Nos. 165 and 195, Cornell University Agricultural Experiment Station, Ithaca, N. Y.

The Treatment of Verminous Bronchitis.—The bronchitis brought about by the presence of worms in the air passages of the lungs is a source of great loss of calves. A reading of some of the literature on the treatment of the disease would lead to the conclusion that it is readily cured, but reports from veterinary practitioners and stockmen indicate otherwise. The writer, in coöperation with Dr. C. W. Fisher, of San Mateo, California, has tested three methods of treatment commonly recommended by writers on the subject. Twelve calves, aged about six months, were treated with remedies administered by intertracheal injections, by inhalation, and internally. As many more calves were kept under the same conditions, but were not treated. No noticeable immediate improvement was noted in the cases treated. After about two months the owner reported that all of the calves, both those treated and those not treated, had recovered. This occurrence renders it quite impossible to attribute benefit to the treatment. The use of a tonic was purposely omitted from the treatment, for purposes of the experiment, but veterinary practitioners think highly of tonic treatment in connection with the use of agents designed to kill the worms.

"Scours" in Calves.—Some observations have been made upon the diarrhœal disease in young calves, commonly known as "scours." Several post-mortem examinations have been made with the assistance of Dr. C. W. Fisher. Nocard* has described a similar disease, and considerable bacteriological work was done by the present writer in an effort to determine whether or not Nocard's recommendations are applicable to California conditions. Further observations are necessary before reaching definite conclusions.

Poultry Diseases.—Work on the pathology and treatment of poultry diseases has had an auspicious beginning under the direction of Dr. Veranus A. Moore, Professor of Comparative Pathology and Bacteriology in the New York State Veterinary College, Cornell University, Ithaca, New York. In company with the writer, Dr. Moore has spent two months in the field among poultrymen and in the laboratory studying the more important diseases. Definite plans are laid for work to be done on these problems in the future, and the publication of three bulletins within the next eighteen months is in contemplation. A copy of the legislative act under the provisions of which the work is being carried on, is appended:

An Act to establish a poultry experiment station in the County of Sonoma, and making an appropriation therefor.

SECTION 1. There is hereby established in the County of Sonoma, at or near the City Petaluma, a poultry experiment station, to be known as the "California Poultry Experiment Station."

SEC. 2. The purposes of said station shall be the study of the diseases of poultry to ascertain the causes of such diseases, and to recommend treatment for the prevention and cure of the same; to ascertain the relative value of poultry foods for the production of flesh, fat, eggs, and feathers; to recommend methods of sanitation, and to conduct investigations for the purpose of securing results conducive to the promotion of the poultry interests of the State. This Act shall be liberally construed to the end that the station hereby established may at all times contribute to the technical and general knowledge of the public upon the subject of poultry husbandry.

SEC. 3. The said station shall be under the supervision of the Director of the Agricultural Experiment Stations of the State of California, who shall, from time to time, cause to be issued bulletins of information regarding the care of poultry.

* Mortality Among Calves in Munster. Bulletin No. 1 (Miscellaneous Series), Department of Agriculture and Technical Instruction for Ireland. Dublin.

SEC. 4. Within thirty days after the passage of this Act the Governor shall appoint three persons, two of whom shall be from the staff of professors in the Agricultural Department of the University of California, and one a practical poultry-raiser, which said persons shall constitute a board or commission to select and secure a site of not less than five acres for such poultry experiment station. Such board shall have full power to secure such site, by lease, purchase, or donation thereof, and shall proceed to the performance of the duties herein imposed within thirty days after receiving notice of their appointment.

SEC. 5. All moneys appropriated for the use of the station hereby established shall be under the control of the Regents of the University of California.

SEC. 6. The sum of five thousand dollars is hereby appropriated out of any money in the State Treasury not otherwise appropriated, for securing the necessary site, and for equipping and maintaining said California Poultry Experiment Station as provided by this Act. Of the amount herein appropriated, the sum of two thousand five hundred dollars shall be available during the fiscal year nineteen hundred three and nineteen hundred four, and two thousand five hundred dollars shall be available during the fiscal year nineteen hundred four and nineteen hundred five.

SEC. 7. The State Controller is hereby authorized to draw his warrants for the sum herein appropriated in favor of the treasurer of the Regents of the University of California, and the State Treasurer is hereby directed to pay the same.

SEC. 8. This Act shall take effect immediately.

Future Investigations.—Under the law providing for the Petaluma Poultry Experiment Station, investigations of the diseases of poultry are in active progress, and will be conducted as extensively as the funds appropriated for the purpose will permit.

ANIMAL INDUSTRY.

By LEROY ANDERSON.

BUTTER-FAT TESTS OF THOROUGHbred COWS.

In January, 1901, the Station issued a circular in which it offered to conduct seven-day milk and butter-fat tests of thoroughbred cows, and in which the rules and conditions of such tests were set forth. Two breeders of Holstein-Friesian cattle have availed themselves of this offer, and thus far the tests of three cows have been supervised by representatives of the Station. The records are for seven days each and are as follows:

Estepilla, No. 36042, H.-F. H. B.; age at last calving, 7 years, 10 months, 8 days; owned by Jane L. Stanford, Vina; April 29 to May 6, 1901, 417 pounds of milk, containing 14.249 pounds of butter fat and an average of 3.42 per cent fat. Feed: 6 pounds of wheat bran and $4\frac{1}{2}$ pounds of rolled barley per day; free access to green alfalfa, alfalfa hay, and oat hay.

Olympia Clay, No. 42186, H.-F. H. B.; age at last calving, 5 years, 11 months; owned by Pierce Land and Stock Company, Stockton. February 19-26, 1902, 526.6 pounds of milk, containing 14.536 pounds of butter fat and an average of 2.76 per cent fat. Feed: 18 to 20 pounds per day of a grain mixture consisting of three parts each of barley, oats, and middlings, and two parts of linseed oil meal; 12 to 20 pounds per day of chopped carrots: access to clover and rye grass pasturage and alfalfa and cereal hay.

Minnewawa Louisa, No. 47285, H.-F. H. B.; age at last calving, 3 years, 9 months, 7 days; owned by Pierce Land and Stock Company, Stockton. April 23-30, 1902, 474 pounds of milk, containing 14.655 pounds of butter fat and an average of 3.09 per cent fat. Feed: same grain mixture as *Olympia Clay* was fed; 10 pounds per day at beginning of test and increased gradually to 20 pounds per day at completion of test; free access to alsike and red clover, and rye grass pasturage.

CHEESE-MAKING.

Instruction at Creameries and Cheese Factories.—In December, 1901, the Station issued a circular in which it offered to send an instructor to render assistance or instruction at any creamery or cheese factory in the State where such might be desired. A few creameries have availed themselves of this offer. At these places the work has consisted of a study of the methods employed in the creamery and of suggestions and demonstrations wherein it was thought by the instructor that an improvement might be made. The time spent at the creamery varied from one to three days, depending upon the necessities of the case and

the time available. In one instance two days were spent in making cheese. The first day the creamery operator made it according to his usual custom, and on the second the instructor followed a system that seemed to him would develop a cheese which is most demanded in California markets, viz., a quick-curing, soft cheese. Both days' cheeses were made by the Cheddar process, but there was marked difference in their curing qualities. The cheese made on the second day was put upon the market in a month, while that of the first day was scarcely as well cured by the end of two months. Both were kept in the same curing room at the same temperature (60°). The difference lay in the fact that the second day's cheese was allowed to develop a higher degree of acid and to retain more moisture than the other.

While only a small beginning has been made in this line of work, yet it has been encouraging thus far and it promises good returns for the time and money invested.

Cheese-Making.—The question is often asked, "Why can not as good cheese be made in California as is made in the East?" We have no intention of entering into a lengthy discussion to answer this question, but would submit that the reason lies most largely in the methods of making and curing. Some market conditions may also have a discouraging influence upon those who would attempt to make cheese according to the Eastern standard.

The cheese made at the first term of the Dairy School, held in the fall of 1901, was by the Cheddar process, and the method used in making such cheese in the East was closely imitated. The cheese was made by the students in the school under the direction of Mr. E. H. Hageman. The milk used was produced at Newman upon alfalfa hay and pasture, and was shipped 150 miles by train and hauled 6 miles by wagon to the University. The cheese-making began about ten o'clock each morning with milk that had been produced the morning and evening of the preceding day. In some instances so much gas had formed in the milk that the curd was washed to remove it, which treatment undoubtedly had a bad effect upon the flavor. The cheeses, of which a score is given below, were each made with a starter from Hansen's lactic ferment. The curing was done in a sub-basement room, where the temperature was uniform at about 55° F., and the degree of moisture ranged from 80 to 90 per cent. The result was that the cheese cured slowly and molded somewhat during the warm weather in February and March, 1902.

About the middle of March a portion of a 28-pound cheese was sent to Prof. H. H. Wing at Ithaca, N. Y., to be scored by him and by Mr. W. W. Hall, Instructor in Cheese-Making at Cornell University. Under date of March 22, Professor Wing writes as follows:

The cheese was certainly a very fine one, and Mr. Hall expressed himself very much pleased with the closeness of the texture. The following is our judgment as to the score:

	Score.	Perfect Score.
Flavor.....	40	45
Texture.....	29	30
Color.....	15	15
Finish.....	10	10
Totals.....	94	100

We were somewhat puzzled in regard to the flavor. There was nothing bad about it and we imagine that the peculiarity was due to the alfalfa. We did not notice this

peculiarity of the flavor, which it is almost impossible to describe, until we compared it with our own cheese. The only fault we found with the texture was that it did not rub down quite smooth and buttery, otherwise it was very fine.

The latter part of April all the cheese remaining at the University was consigned to W. H. Roussel & Co., of San Francisco, for sale. Under date of May 10th, we received the following letter from that firm:

We received a shipment of cheese from you a few days since, which we understand is the product made by the students during the last term of the Dairy School. Such being the case, we are pleased to say that it is the best California-made cheese we have ever seen. In scoring it we have not lost sight of the fact that it is a California product, but we find that it compares very favorably with a fine New York cheese. * * * We have taken the following score from a cheese made under date of October 18, 1901. If we saw fit to select a more perfect cheese in exterior appearance, the score would have been one quarter higher. We aimed to take a fair sample, which scored as follows:

	Score.	Perfect Score.
Flavor.....	42½	45
Texture.....	29½	30
Color.....	10	10
Salt.....	9½	10
Finish.....	4¾	5
Totals.....	96¾	100

The flavor of the cheese is clean and full, but is somewhat affected by over-salting. The salt seems to have developed a sharpness foreign to a cheese of this class. A little less salt and more age would, in our opinion, produce the change desired. The texture when compared with a fine New York cheese lacks silkiness, but if compared with a general run of California cheese it is perfect. We hope to see the coming term of the School produce a cheese equaling the New York product in everything but name.

(Signed:) W. H. ROUSSEL & CO.

The loss of one fourth of a point on the appearance of this cheese was due to the mold caused by the damp curing-room. The excess of salt was due to adding a little more than the usual amount in order to reduce the gas in the curd. These two reports give much encouragement to our first efforts in making cheese at the University. It is hoped that much more similarly good work may be done.

WEEDY FLAVORS IN BUTTER.

At the request of Mr. P. A. Raab, of Bolsa, Orange County, we spent several days in March, 1902, at his creamery, endeavoring to find some method to get rid of flavors in butter which seemed traceable to weeds which the cows found in the pastures. The milk on being received at the creamery showed, in some instances, a peculiar, disagreeable odor. This peculiarity, however, did not seem to be present in the same patron's milk each day. One day a producer's milk would be tainted, and perhaps the next day there would be scarcely any noticeable foreign flavor present. The milk that showed the most uniformly bad flavor came, as a rule, from the lower lands, where the cows fed at times upon willow sprouts. These, together with rag weed, seemed to be the chief source of difficulty. In no case were the flavors particularly obnoxious, such as those obtained from yerba mansa, mustard, and the like. They were of sufficient moment, however, to be noticeable in the butter as weedy flavors, and to prevent the butter from being considered of perfect flavor. Since the butter-maker has no control over the feed of the cows, it was our effort to remove the weedy flavors from the cream so far as it seemed possible to do so by the various methods which occurred to us, and as time allowed.

The chief means used to eliminate the weedy flavors were washing the cream, pasteurizing and using a pure-culture starter. The pasteurized and washed cream was from about 400 pounds of milk in each case, an effort being made to select the worst milk of the day for experiment. All the rest of the milk was made up in the usual method of the creamery, details of which will appear later. The cream from the small amount of milk named above was ripened in an ordinary pasteurizing can, churned in a hand barrel churn, and the butter worked and molded by hand. We are indebted to Mr. O. F. Weber, manager for G. G. Wickson & Co., at Los Angeles, for the loan of apparatus for the work.

In order to avoid unnecessary repetition, we may here describe something of the method of churning and working the butter. In each case the churning ceased when the butter granules were large enough to allow the free removal of the buttermilk. The butter was then washed twice in water of 54° and allowed to drain thoroughly. Salt was then added at the rate of one ounce to one pound of butter. The churn was revolved a few times to mix the salt, and then allowed to stand fifteen or twenty minutes for the salt to dissolve. The hand working of the butter consisted in just enough to make the particles adhere closely. The working in the combined churn was carried along further than this. Hansen's lactic ferment was used for a starter, and was made in the usual way from pasteurized skim milk taken directly from the separator. Farrington's alkaline tablets were used to make the tests for acidity.

A two-pound square of butter from each churning was sent by express to W. H. Roussel, of San Francisco, who scored each sample three times,—first, as soon as received; second, ten days later; and third, one month after the first. No description of the method of making the butter was sent to Mr. Roussel, the only mark of identification being the number and date of making. No effort was made to give the butter a good storage room, between the different scorings. It lay in Mr. Roussel's office during the whole month, where there was a fire nearly every day. We wished to note the effect of poor storage upon the flavor, since that is the kind of storage that butter often receives in the hands of the consumer. Mr. Roussel's score of each sample follows the description of the method of making. He has commented fully upon the score, and thus added a value to the experiment which it could not otherwise have possessed. In the second and third scorings no points were considered except flavor, since all remaining characters may be counted as unchanged. The chemical analysis of each sample was made by Mr. C. A. Triebel, student assistant in the laboratory of agricultural chemistry.

The details in regard to each sample are as follows:

No. 1. *Washed Cream*.—March 18, 10:00 A. M. Milk separated at a temperature of 78° . Cream mixed with as much water at temperature of 80° as there was of original milk (419 lbs.). Separator was cleaned and the watered cream run through. The cream, thus washed, was cooled to 64° and allowed to stand in the ordinary temperature until the next morning at 6:45 o'clock, when it registered 60° . The acidity was 0.2 per cent. The cream was cooled to 52° by adding ice, and churned at 8:30 A. M. No starter of any kind was used in this cream.

Percentage Composition of the Butter.

Water	8.41
Salt (ash)	1.77
Fat	88.11
Curd	1.62

Score.

March 22—		
Flavor	40	No flavor whatever; lardy taste.
Grain	26	Short pasty.
Color	9	Too light; dead; no life.
Salt	9½	Too lightly salted.
Finish	5	
Total	89½	
April 4—		
Flavor	37	Lardy; becoming slightly rancid; very objectionable market butter.
April 22—		
Flavor	34	Rancid.

Perfect score: Flavor, 45; grain, 30; color, 10; salt, 10; finish, 5; total, 100.

No. 2. *Regular Practice of the Creamery. Buttermilk Starter.*—March 19, 8:00 A. M. Milk separated at a temperature of 80°. Cream cooled immediately over a "Star" coil to 64° and placed in a vat surrounded by running water at the same temperature. Buttermilk from the previous churning, to the amount of one tenth of the total cream, was put into the cream vat for a starter before separating began. 2:00 P. M., 25 gallons of cream from a skimming station was added to the above. 4:00 P. M., ice added and the cream cooled to 54°, at which temperature it remained until churning on the following morning. The per cent of acidity at churning was 0.51.

Percentage Composition of the Butter.

Water	11.23
Salt (ash)	1.89
Fat	85.73
Curd	1.50

Score.

March 22—		
Flavor	42	Quick; not clean; slightly weedy.
Grain	28	Salvy; overworked.
Color	9¾	A little light.
Salt	9¾	Lightly salted.
Finish	5	
Total	94½	
April 4—		
Flavor	37½	Weedy; growing off-flavor.
April 22—		
Flavor	34	Rancid.

No. 3. *Cream Pasteurized in Can.*—March 19, 10:00 A. M. Milk separated at a temperature of 80°. Cream heated in a water jacket to 150° and held at that temperature twenty-five minutes. Cooled by running water to 75° in one hour. At 6:00 P. M. the temperature was 64°, at which time 4 per cent of Hansen's pure-culture starter was added. March 20, 5:45 A. M., ice added and the cream cooled quickly to 46°. Acidity at 7:15 A. M., 0.50 per cent, when the cream was churned.

Percentage Composition of the Butter.

Water	10.31
Salt (ash)	1.81
Fat	86.80
Curd	1.17

Score.

March 22—		
Flavor	42½	Clean, but not quick; would judge the cream was pasteurized.
Grain	29	A very little more working would help it. Floury texture peculiar to pasteurized butter.
Color	10	
Salt	10	
Finish	5	
	<hr/>	
	96½	
April 4—		
Flavor	43½	Clean, but aroma not full; medium quick.
April 22—		
Flavor	38½	Sweet, with no flavor at all.

No. 4. *Milk Pasteurized over "Star" Coil.*—March 20, 10:00 A. M. Milk was heated to 145° over a "Star" aërotor by running water at a temperature of 180° through the coil. The milk was then separated and the cream cooled immediately to 68° over the "Star" aërotor. Six per cent of Hansen's starter was added, and at 4 P. M. 0.32 per cent of acid had developed. The cream was iced to retard the acid development, and at 7:00 P. M. the temperature was 42°, with the acidity the same as at 4:00 o'clock. March 21, 5:30 A. M., temperature of cream 44°, warmed to 60° by running water. Acidity at 7:30 o'clock, 0.37 per cent; at 8:30, 0.43 per cent. The cream was then churned, temperature 58°.

Percentage Composition of the Butter.

Water	8.34
Salt (ash)	1.80
Fat	87.87
Curd	1.46

Score.

March 25—		
Flavor	42	Sweet, clean, but with a rather sweetish artificial flavor.
Grain	29	Short, compact, peculiar to butter made from pasteurized cream.
Color	10	
Salt	10	
Finish	5	
	<hr/>	
	56	
April 4—		
Flavor	42	Sweet, clean, no positive flavor, no aroma. Tastes like first-class oleomargarine.
April 22—		
Flavor	38	Sweet, but showing slight signs of getting strong.

No. 5. *Regular Practice of the Creamery. No Starter.*—March 20. This butter was made in the same manner as No. 2, except that no starter was used. It is of interest to note that the amount of acid developed was, however, nearly the same as when a 10 per cent butter-milk starter was added. The milk was separated at 80° and the cream cooled immediately to 64°. At 4:00 o'clock in the afternoon the cream was iced. At 5:00 o'clock the following morning the temperature was 56° and the acidity 0.46 per cent.

Percentage Composition of the Butter.

Water.....	13.11
Salt (ash).....	2.60
Fat.....	82.00
Curd.....	1.68

Score.

March 25—		
Flavor.....	39	Weedy—mustard or watercress.
Grain.....	30	
Color.....	93¼	A little light.
Salt.....	10	
Finish.....	5	
	93¾	
April 4—		
Flavor.....	42½	Quick, but not quite full, slight aftertaste, bordering on fishy.
April 22—		
Flavor.....	35	Partly rancid, badly discolored.

No. 6. *Regular Practice of Creamery. Hansen's Pure-Culture Starter.*—March 21. This butter was made in like manner to Nos. 2 and 5, except that a 10 per cent Hansen's pure-culture starter was added to the cream at the beginning of separation, with the cream at a temperature of 64°. At 3:00 P. M. the acidity was 0.40 per cent and the temperature 64°. Ice was added at 3:15 P. M., and at 6:00 P. M. the temperature was 58° and the acidity 0.46 per cent. March 22, 5:30 A. M., temperature of cream 56°, and acidity 0.55 per cent. Sufficient ice was added to cool the cream to 54°, when churning began.

Percentage Composition of the Butter.

Water.....	11.45
Salt (ash).....	2.76
Fat.....	83.77
Curd.....	1.63

Score.

March 25—		
Flavor.....	39	Same as No. 5 in flavor (weedy)
Grain.....	30	
Color.....	93¼	A little light.
Salt.....	10	
Finish.....	5	
	93¾	
April 4—		
Flavor.....	43	Quick aroma and flavor; slight aftertaste similar to No. 5.
April 22—		
Flavor.....	36	Slightly strong, on verge of ran- cidity.

No. 7. *Cream Pasteurized in Can.*—March 21, 10:00 A. M. This butter was made in like manner to No. 3, except that no starter was used. The cream was heated in a water jacket to 150° and held at that temperature for twenty minutes. It was then cooled by running water. At 1:00 P. M. the temperature was 68°, and at 6:00 P. M. 66°, with the acidity at 0.20 per cent. March 22, 5:30 A. M., temperature of cream 57°, acidity 0.22 per cent. Cream iced to 50°, and churned.

Percentage Composition of the Butter.

Water.....	6.20
Salt (ash).....	1.40
Fat.....	90.30
Curd.....	1.58

	<i>Score.</i>	
March 25—		
Flavor	42	Sweet, clean, but with a rather sweetish artificial flavor.
Grain	29	Short, compact, peculiar to butter made from pasteurized cream.
Color	10	
Salt	10	
Finish	5	
	96	
April 4—		
Flavor	42½	Sweet; clean; no aroma; nothing objectionable.
April 22—		
Flavor	38	Sweet, but with no flavor; not rancid.

ECONOMIC BOTANY.

By H. M. HALL.

The work of the Assistant Botanist for the year ending June 30, 1903, has been as follows:

1. Identification of plants sent in and replies to inquiries on botanical subjects. This forms the major portion of Station work.

A list of the plants sent in for determination, with remarks on their economic value, accompanies this report. Requests for information, not accompanied by specimens, are not here reported.

2. The building up of an herbarium of *economic plants*. The number of sheets in the economic herbarium has been increased during the present year from about 600 to 1,061. Arrangements for exchange with other collectors have been made whereby it is hoped that this increase may be continued. The general herbarium of the Department of Botany has also been under the care of the assistant botanist, and although no funds are allowed for the purchase of specimens, about 8,000 sheets have been added during the year. A botanical museum is being formed as rapidly as possible.

Although these collections are a part of the equipment of the Department of Botany of the University, they are here mentioned because of their importance and value to the Station. Much of the material sent to the Station for determination is quite fragmentary or consists merely of some one part of the plant. In many cases this could not be definitely determined, were it not for the named specimens in the collection with which it may be compared. The collections are at all times accessible to members of the Station staff.

3. The collection and preparation of *seeds* for the seed collection belonging to the Station. This collection now numbers 1,139 bottles and vials. It is used both as an aid in the determination of seeds and for purposes of instruction.

4. A study of the *weeds* and *poisonous plants* of the State. Besides studies in the herbarium, this necessitates extended botanical excursions in order that one may become familiar with these plants, their distribution and the conditions under which they grow, and to make collections of them for the economic herbarium and the seed collection. During the spring of 1903 botanical work was prosecuted in southern California, and during the coming summer it is proposed to cover the northeastern part of the State, working as far south as Stanislaus County. These trips are made without the aid of Station or other University funds.

5. Studies and investigations in economic botany in general.

6. Determination of plants in the economic garden. Owing to careful determinations made in past years by Mr. Davy, this has demanded but little attention during the year just closed; but the assistant botanist always holds himself in readiness to make the determinations. Closely connected with the work of the economic garden is the botanic garden of the Department of Botany, and this has been under the immediate charge of the assistant botanist. Here especial attention is given to native California plants, and as these are frequently of economic importance the two gardens bear an intimate relation to each other.

CLIMBING VINES FOR SOUTHERN CALIFORNIA AND NORTHERN MEXICO.

In reply to inquiries concerning vines adapted to these sections the following reply has been made: Bougainvilleas (all species) are very ornamental, easily cultivated in regions of little or no frost, and are rapid growers. *Solanum wendlandii* is one of the most satisfactory and showy climbers in southern California, where it is said to climb to a height of 50 feet; it is also one of the most easy to propagate, but will not stand heavy frosts. The Blue Dawn Flower (*Ipomoea oleari*) is especially valuable for covering unsightly objects, since it grows very rapidly and has a dense foliage. Several species of *Lonicera* are also valuable for this purpose. The Cape Honeysuckle (*Tecoma capensis*) is suitable for verandas, and the Trumpet Creepers (*Tecoma radicans* and *T. grandiflora*) are good climbers. *Bignonia venusta*, a profuse bloomer with crimson-orange flowers, the Wisterias, and the Jasmines are also favorites.

STREET AND ORNAMENTAL TREES FOR CALIFORNIA.

Letters have been received from Mrs. E. W. Steele, Edna, San Luis Obispo County; H. A. White, San Martin, Santa Clara County; W. C. Taber, Sanger, Fresno County, and others, asking for a list of trees suitable for street and ornamental planting. The following is a summary of the replies to these letters:

Before selecting any particular species it might be well to notice some of the characters which any tree must possess in order to commend itself for consideration as a street tree. In the first place it should not be shallow-rooted, since roots near the surface often play havoc with sidewalks. Tall trees are apt to interfere with telegraph wires, while those that branch near the ground often become a nuisance by reaching out across the sidewalks and roads. Narrow and slender trees, on the other hand, give an insufficient amount of shade, which should be avoided except on east and west streets. The ideal tree for most streets, so far as shape is concerned, is one that branches about 5 feet from the ground, whose branches run up, instead of out in a horizontal direction, and which attains a height of from 20 to 30 feet. Other characters of the ideal tree are that it appear green and glossy even at the end of a dry and dusty summer; that it be not poisonous or otherwise dangerous to children; that it does not produce an insufferable amount of litter, and above all that it be adapted to our soil and climate. Aside from its beauty it should have a hospitable and friendly aspect, if these terms may be so used. Trees which seem cold and distant—those under which children do not love to play, for example—are not the ones for our streets. It is difficult of course to find a tree which answers all these requirements, but the following have been found to be the most satisfactory:

1. STREET TREES FOR WESTERN CALIFORNIA.

Mayten (*Maytenus boaria*). A hardy evergreen with graceful habit and deep glossy-green leaves, becoming 25 feet high with us.

Ginkgo, or *Maiden-hair Tree* (*Ginkgo biloba*). An upright, very hardy evergreen, from 60 to 80 feet high, which has the advantage of being free from pests. It is a great favorite in the streets of Washington,

D. C. The fruits have a foul odor, and therefore only trees grafted or budded from staminate trees should be used, since these produce no seeds.

Dracenas (*Cordyline indivisa* is the best species). These are tall, palm-like trees, with straight stems and leaves in tufts at the ends of the branches. A long avenue of tall *Dracenas* would be a beautiful sight, but they should not be mixed in with other trees, since there are few with which they harmonize. They are rapid growers and easily propagated.

Palms. There are many well-known species of palm on the market.

Camphor Tree (*Camphora officinalis*). A beautiful evergreen, easily grown but not hardy, withstanding only light frosts. It remains small, and is perhaps better adapted to lawns and yards than to streets.

Acacias and Wattles. There is much prejudice against these trees, but they are admirably adapted to our climate and will often grow in soil too dry for other trees. *Acacia mollissima* is one of the handsomest and becomes a large spreading tree. *A. melanoxydon* is also a large tree, but has a much more dense foliage, and is objectionable in some places on account of its shallow rooting and the litter made by the falling seed pods. *A. longifolia* may be useful where a small tree is needed, but it lacks the beautiful feathery foliage of the other species just named.

The *Eucalypts*, or gums, are serviceable for country streets. They are so well known that they need merely to be mentioned.

California Pepper Tree (*Schinus molle*). A favorite in southern California and does well with irrigation in warm parts of the great central valley. Too spreading and low for narrow streets, but admirable for avenues or as a shade tree. Since the berries cause an objectionable litter, only the staminate trees should be planted.

Among the deciduous trees, the *Silver* and *Broad-leaved Maple* and the *Linden* are the most satisfactory. The *American Elm* is much used, as also is the *Cork Elm*, the only objections to these trees being their shallow-rooting and the numerous root suckers, which often form thickets a considerable distance from the tree. The *Box-elder* (*Negundo aceroides*) is also a favorite, and makes a large, well-formed tree, if frequently pruned.

2. ORNAMENTAL TREES FOR LAWNS, YARDS, AND PARKS.

Araucarias. These are stately evergreen trees, natives of Chili, and are noted for the systematic arrangement of their branches, which grow in distinct whorls about the central stem. *Araucaria bidwillii* and *A. excelsa* (the latter known as Norfolk Island Pine) are the most used. The "Monkey Puzzle" (*A. imbricata*) is a peculiar species often seen in lawns.

Lyonothamnus floribundus, a native of our coast islands, is still rare in cultivation, but is one of our most handsome ornamental trees. It is slenderly conical in outline, and the graceful drooping branches are densely clothed with deep-green leaves of a peculiar shape.

Cryptomeria japonica, the noted avenue tree of Japan, is adapted to some yards. By some it is considered too somber to be of much value as an ornamental.

Islay (*Prunus ilicifolia*). This is a native of California, valuable chiefly because of its large purple fruits and its glossy leaves, which

seldom become dust-covered. It is scarcely more than a shrub, but should receive more attention as an ornamental plant.

Other ornamental trees adapted to our climate are the various species of Palm and of Pittosporum, the Brachychiton (*Sterculia diversifolia*), and many others.

PLANTS RECEIVED FOR IDENTIFICATION.

During the past two years about 350 plants have been received for identification by the botanists of the Station. Many of these are described and their economic value given in the following pages. Others are merely mentioned in additional lists, where the names of the senders are followed by the names of the plants submitted for determination. Still others are omitted from the lists, for the reason that the names of senders are not given.

JULY, 1901, TO JUNE, 1902.

By J. BURT DAVY.

Abele (*Populus albavans*); B. U. Smyth, San Francisco.

Ague-weed (*Erythraea atrichantha*); D. T. Fowler. Known as canchalagua by the Spanish-Californians. In a fresh state it is considered a valuable remedy in cases of ague; it is reported that its valuable medicinal properties are entirely lost in drying.

Alkali Slender-grass (*Leptochloa imbricata*); B. Johnson, Walters, Riverside County. Is common in moist places and alkali plains from Tulare Valley through the Colorado Desert to Lower California and eastward into Mexico and Texas. It is commonly found in fields and gardens and grows thriftily on alkali plains and near salt water, being particularly abundant in August and September "when alfalfa is dried up." It is said to be a good forage plant if cut and fed to animals.

Angophora intermedia; John Rock, Niles, Alameda County. A valuable avenue and street tree, much planted in New South Wales, and found thoroughly satisfactory.

Bitter Root (*Lewisia rediviva*); A. C. Bryant, Calistoga, Napa County. It is the "recina d' amere" of the French trappers of the Rocky Mountains of the Northwest, where it is common, and an article of food among the Indians.

Bonduc or *Nicker Nut* (*Cæsalpinia bonducella*); Prof. George Davidson, San Francisco. Tropical seeds washed up on the coast of Alaska, evidently carried by currents; the small ovoid gray seed is that of the "Bonduc" or "Nicker Nut" (*Cæsalpinia bonducella*, L.), common in littoral districts of tropical Asia and found in all parts of the tropics. It is reported as growing in the following among other localities on the Pacific coast: Pakhoi, Hongkong, Kwangtung, opposite Hongkong, Formosa, the Luchu Archipelago, and all the islands of the Hawaiian group (where it is known as "Kakalaica"). It has also been found on the coasts of tropical America, at Papaula, South Mexico; Puntarenas, Costa Rica; Panama, etc. Dr. Davidson reports that the Bonduc is used by Alaskan natives as a talisman, and whoever possesses it will have a great find of sea otter. In British India the powdered kernels are used against intermittent fevers and as a general tonic.

Bronco-grass (*Bromus maximus gussoni*); J. J. Chappell, San Francisco. This grass is practically useless, and is doing injury to the ranges, as it crowds out more nutritious and better-liked species. Stock do not seem to like it, even early in the season before it has headed out; after it has headed and becomes ripe, the awns are almost as injurious as those of Foxtail. If there is not yet much of this grass on the range, it would probably pay to have it mown by hand, raked together and burned before the seeds mature, which they do quite early. If one has a silo, it would be preferable to mix the Bronco-grass with any other forage which is going to be used as silage for fall or winter use.

Bur-clover (*Medicago denticulata*); George Heintzen, Brown's Valley, Yuba County. A luxuriant specimen of a kind of Bur-clover, probably the common Bur-clover (*Medicago denticulata*). The Bur-clovers are valuable forage plants after they have become dry; the seeds are highly nutritious and are greedily eaten by cattle at the season when green feed is scarce. The Bur-clovers are good nitrogen-gatherers, and for this purpose are as valuable as Clovers; the only objection to them is that they do not yield a sufficiently heavy weight of foliage per acre, to furnish all the humus desirable.

Bermuda-grass (*Cynodon dactylon*); J. C. McCubbin, Reedley, Fresno County. In this State never, or rarely, appears to grow large enough to mow. Foxtail (so called) is better named "Barley-grass" and is known botanically as *Hordeum murinum*. It is an entirely different grass from the Meadow Foxtails which are grown for forage in the East and in Europe. The best way to get rid of Foxtail is to cut it before the seeds mature; one of the best methods of treatment is to put the first crop of Foxtail and Alfalfa into the silo. Foxtail and Alfalfa together make an admirable silage, forming a nearly balanced ration.

Cieba; Prof. George Davidson, San Francisco. The Mexican "Cieba" is *Bombax cieba* (family Malvaceæ), a large tree with soft (and probably light) wood. There are other species of *Bombax* in the East Indies.

Canutillo and *Jelopote* (*Ephedra* sp., probably *E. californica*); Dr. Alex. De Borra, San Diego, San Diego County. Called by the Mexicans "Canutillo" and "Jelopote." Several if not all of the species of *Ephedra* are extensively used by the Indians and Mexicans as a tonic in the form of a tea.

Corn-cockle (*Agrostemma githago*); D. T. Fowler, Oakland, Alameda County. Weed seeds found in Hairy Vetch seed imported from the East, and is classed as one of the one hundred worst weeds of the United States. It is an annual plant, a native of Europe, and is found most abundantly in wheat fields, where it is injurious, as the large seeds are not easily cleaned out of the wheat and contain a poisonous principle which is said to render the flour unwholesome to man when occurring in great abundance. Cases of Corn-cockle poisoning have also been noted among all sorts of poultry and household animals. The poisoning is generally produced from a poor grade of flour containing Corn-cockle. Machinery is used to remove these seeds from the wheat, but the difficulty of separating them is so great that the desired object is not entirely accomplished. The quantity of Cockle seed remaining determines the grade of flour in this particular regard; it sometimes amounts to from 30 to 40 per cent, but this quality is sent out only by ignorant or unscrupulous dealers, and is intended for consumption by animals only. Flour containing a smaller amount has often been made into bread, sometimes with fatal results, the baking not always being sufficient to decompose the poison. The effect may be acute, or, if a small quantity of the meal is eaten regularly, it may be chronic. It is always recommended that wheat containing Corn-cockle seeds should be rejected for planting, but in the case of Hairy Vetch it seems probable that the Vetch would choke out the cockle in most cases. On the other hand, from the very fact that the Vetch seed seems to contain such a large amount of Corn-cockle it is evident that it must have matured along with the Vetch. As Corn-cockle is not abundantly distributed in California at present, it seems very undesirable to introduce it in this wholesale manner and a cleaner grade of seed should be demanded. Among the Corn-cockle there is a small quantity of seed of Cleavers (*Galium aparine*), an annual climbing weed which is never considered very troublesome.

Cytisus canariensis; Mrs. N. O. Henn, Alameda, Alameda County. A cultivated garden plant becoming naturalized in several places around San Francisco Bay.

California Hair-grass (*Deschampsia holciformis*); D. Jacks, Monterey, Monterey County. A grass from the pine woods near Monterey, that is not readily eaten by cattle. We have had no opportunity to determine whether sheep will eat it or not.

Darnel (*Lolium temulentum*); T. K. Underwood, La Mirada, Los Angeles County. Closely related to Ray-grass (*Lolium perenne*). The seed of Darnel contains a narcotic principle called lolin, which has in some cases proven poisonous to man, to flesh-eating animals, and to rabbits, causing eruptions, tremblings, and confusion of sight; but it does not affect hogs, horned cattle, or ducks. Experiments tend to show that the seeds are not poisonous to all persons alike. In some parts of California this grass is called Cheat, but the true Cheat is a very different plant. Darnel has no known forage value, and becomes a troublesome weed in grain-fields, especially in wet seasons; it is popularly supposed that a wet season causes the Wheat to deteriorate in a single season into either Darnel or Cheat. This is not the case, however, and it is as impossible for Wheat to change into Cheat or Darnel, even in the course of several seasons, as it is for Wheat to change into Barley or Oats.

Euphorbia splendens; Ralph Gibbs, Berkeley, Alameda County. A greenhouse plant extensively grown in California as an ornamental. The involucre contains several flowers and has developed a pocket on the side, which is a honey gland.

Furze or *gorse* (*Ulex europæus*); John Rock, Niles, Alameda County. A useful hedge plant, native of Europe; it is sometimes browsed by cattle when other forage is scarce.

Gnawed Canary-grass (*Phalaris paradoxa*); J. Stern & Co., San Francisco. An annual grain weed introduced on their ranch in the Montezuma Hills near Rio Vista, Solano County. As the land was summer-fallowed and "perfectly clean" when sown, this weed probably came in with seed grain. Sow only clean seed, and have it tested for impurities before buying, if possible.

Halberd-leaved Orach (*Atriplex hastata*); N. E. Leek, Modesto, Stanislaus County. A fairly common annual weed in cultivated ground, but one which is easily gotten rid of, and which can not be considered injurious; it is probable that it would be choked out by a good stand of Alfalfa.

Horse-weed (Erigeron canadensis); *Epilobium paniculatum*; *Spiny Clot-bur (Xanthium spinosum)*; J. C. McCubbin, Reedley, Fresno County. All three of these plants are annuals, or "seed-growing plants" as they are sometimes popularly called, and should not be very difficult of eradication, the main principle to be borne in mind in any method adopted being the prevention of seeding. Late cultivation should destroy the larger part of these weeds, and the remainder might be pulled by hand before they become too large. In the case of the Clot-bur, the spines will interfere with the last mentioned method, but it is easily hoed out with a heavy hand hoe. Occasional mowing with a scythe or mowing machine might answer the purpose when the Clot-bur occurs in large masses, but it is not certain that new shoots would not be formed from the base of the old stems, under some conditions.

Jajoba (Simmondsia californica, Nutt.); H. H. Gird, Bonsall, San Diego County. The inhabitants of Lower California eat the fresh seeds, deprived of their covering, like almonds; when dried by fire, and ground, they are used as a beverage, in the form of tablets made up with sugar, or as a simple infusion. An analysis of the fire-dried seeds, made by the French Government, shows them to contain 48.3 per cent of fatty matter. The oil solidifies at 5°, is suitable for food, and of good quality, and is said to possess the immense advantage of not turning rancid; in Lower California it is prepared by ebullition with water. The French Government recommends this shrub for experimental culture in the desert regions of the French colonies of North Africa.

Japanese Privet (Ligustrum lucidum); J. M. Hunter, Bakersfield, Kern County. Frequently becomes a tree 20 feet high under ordinary conditions, and in the fertile soil and warm climate of Bakersfield might easily reach 40 feet. It is an exceedingly useful and ornamental shade tree.

Johnson-grass (Andropogon halepensis); C. E. Johnson, Staten Island, San Joaquin County. Johnson-grass is a native of the warm parts of the Old World, and was introduced into the United States about sixty years ago; it is now widely distributed and well known throughout the Southern States.

The Department of Agriculture, at Washington, D. C., has published the following notes with regard to it: "In the warmer parts of the Southern States it makes rapid growth, is but little affected by drought, and the hay, if cut just as the grass is coming into blossom, is much liked by all kinds of stock. Two or three cuttings may be made during the season. The extensively creeping rootstocks are fleshy and tender, and hogs are very fond of them. These roots literally fill the ground near the surface, and every joint is capable of developing a new stem. This grass, when once it has become established, is exceedingly difficult to eradicate, and hence has come to be greatly feared by the majority of farmers. Unless one wishes to give up his land entirely to Johnson-grass, and can certainly prevent its spreading to the lands of others, its introduction would be of doubtful economy, owing to its powerful and rapidly spreading roots."

Johnson-grass is particularly injurious in cultivated fields and among hoed crops, but some of our farmers state that it is not so difficult to eradicate as is generally supposed. In the South, alternate cultivation and cropping are recommended, but in the orchards of the San Joaquin Valley it has been found best to run the weed-cutter through the patch wherever the grass shows the least sign of greenness, thus choking it by "preventing it from breathing," as the farmers say.

Jacaranda ovalifolia (synonym, *J. mimosæfolia*); Mrs. Palache, Berkeley, Alameda County. The tree is much cultivated for ornament in southern California, and is proving hardy and blossoming in sheltered places in Berkeley.

Lamb's-tongue Plantain (Plantago lanceolata); Guill Bros., Colusa, Colusa County. Was introduced into this country some years ago as an addition to sheep ranges, and is sometimes grown in Europe on sheep pastures. The plant stands drought fairly well and yields a certain amount of green forage in the dry season, but the yield per acre is small and the plant has the disadvantage of choking out other and more nutritious plants. On certain dairy ranges at Point Reyes it has seriously diminished the carrying capacity of some of the most valuable pastures, and it is there considered, as it is in some other parts of the State, a great nuisance. At Point Reyes it was introduced accidentally with seed of Australian Ray-grass imported fresh from Australia. This shows the importance of testing imported seed for freedom from weeds, and either refusing or thoroughly cleaning those found to be mixed with impurities.

Lupin; H. W. Wrightson, Oleander, Fresno County. Native lupin. Being a perennial it withdraws too much moisture from the soil in the dry season, becoming injurious to crops.

Many-flowered Ray-grass (Lolium perenne multiflorum); W. S. Tevis, Bakersfield, Kern County. A species which has proved valuable as a forage grass for somewhat moist places and bottom lands on stock ranges in various parts of the State. It is a native of southern Europe, and the seed has not yet, as far as we can learn, been placed upon the market. *Lolium multiflorum* is said to be common in western Oregon, and we think seed of it can be found, say in the vicinity of Monmouth; we believe, however, that Italian Ray-grass (*Lolium perenne italicum*) would be found even more valuable and just as satisfactory on the soils referred to, viz.: "in and around meadows and along the bottoms of cañons, near the margin of streams." This grass can be obtained from San Francisco seedsmen.

Many-flowered Millet-grass (Oryzopsis miliacea); W. S. Tevis, Bakersfield, Kern County. Concerning this grass there is an account on page 6 of "Reports on Grasses and Forage Plants," by Prof. E. J. Wickson, in the report of this Station for 1895-97, page 271. The seed of this species was at one time offered in California, but it does not appear to be now on the market, either here or in the East. The only way to obtain it in quantity will be to grow one's own stock.

Monterey Pine (Pinus radiata); F. W. Bradley, San Diego. This tree is one of our most rapidly growing pines, and attains a height of from 80 to 100 feet under the most favorable circumstances, though it is often found not more than 50 feet in height on poor, sandy land. The spread is about 30 feet.

Nut-sedge (Cyperus rotundus); D. T. Fowler, Oakland, Alameda County. A troublesome weed from the Newcastle fruit district.

Nostoc pruniforme; C. T. Patriarche, San Francisco. This plant usually lives in fresh spring water; stagnant or impure water would probably destroy it. It is not known to contaminate the water and does not decay in it; a German botanist tried keeping it in a closed bottle for ten years, and at the end of that time it had not decayed and the water was still fresh. Identified by Professor Setchell.

Nut-grass (Cyperus rotundus); E. F. Van Loven, Colton, San Bernardino County. A troublesome weed, introduced by seeds, and also by means of the tubers which are often found in the packing around imported plants and among roots of trees. The following methods of eradication are recommended: (1) Alternate cultivation and smothering crops; (2) Repeated spudding; (3) Frequent cultivation throughout the season; (4) Thick seeding with some forage crop such as Alfalfa. Use vigorous measures before the pest gets too fast a hold; by constantly picking over the spots as soon as any leaves appear, taking care to get out every visible root, it should be possible to eradicate it before very long. Any neglect for a very short period will quickly restore this plant to its former abundance; persistent watchfulness is the price of liberty.

Oxalis corniculata; W. H. Warren, Los Angeles. This is a troublesome garden weed, native of Europe. In the pharmacopoeias it is referred to under the name of *Oxalis stricta*; it contains acid potassium oxalate (oxalic acid), and has long been considered to possess antiscorbutic, diuretic, and sedative properties. Externally the bruised leaves are sometimes applied to cleanse and stimulate foul ulcers.

Poison Darnel (Lolium temulentum); B. Johnson, Walters, Riverside County. Darnel has no known forage value, and becomes a troublesome weed in grain fields, especially in wet seasons. The seed of this grass contains a narcotic principle, called lolin, which has in some cases proved poisonous to man, to flesh-eating animals, and to rabbits, causing eruptions, trembling, and confusion of sight; it does not affect hogs, horned cattle, or ducks. It is not likely that this grass will prove injurious in the way that Bermuda-grass does. Usually it does not live more than a single season and does not spread from the root. If it becomes excessively abundant in Alfalfa, it would be comparatively easy to get rid of it by cutting, especially before the seeds become ripe; treated in this way the grass will add to the quality of the Alfalfa hay or silage, forming a more nearly balanced ration.

Silk Vine (Periploca graeca); T. Lee, Del Monte, Monterey County. An ornamental vine, native of southern Europe and hardy in middle California, being particularly well adapted to cultivation in the immediate vicinity of the coast and preferring somewhat moist situations.

Sheep Sorrel (Rumex acetosella); N. E. Leek, Modesto, Stanislaus County. A troublesome weed now widely distributed throughout the State. It is classed as one of the one hundred worst weeds of the United States, but is principally injurious in gardens and pastures. It is now so abundant with us, however, that the small amount of seed present in the sample is not likely to add materially to the amount already in the State; moreover, it is probable that Alfalfa would choke it out, as Alfalfa has a much deeper root, and grows much taller than the Sorrel.

Soft Chess (Bromus hordeaceus); J. J. Chappell, San Francisco. A species, accidentally introduced from southern Europe, which has taken possession of the uplands in many parts of the State and is proving the salvation of the ranges in regions which have been overstocked. This grass affords an abundance of early feed, is not much eaten while the heads are green, but after they have ripened the cattle go over the range again, eating off the heads of ripe seed, on which they are said to become "rolling fat." This grass seeds heavily and is able to maintain itself on the range, provided that the pastures are not eaten down too closely.

Spiny Clot-bur (Xanthium spinosum) and *Horehound (Marrubium vulgare)*; Miss A. E. Nye, Willows, Glenn County. The Spiny Clot-bur is an annual, but seeds the ground so heavily that cultivation during a single season is not likely to be sufficient to destroy it. Mature plants should always be burned in order to destroy the seeds, and it will be necessary to cultivate the ground thoroughly and keep the plants from forming seeds during two or three seasons before they are sure to be eradicated. The Horehound is a perennial and is still more difficult to eradicate; the best way to cope with it is to grub the plant out by the roots every time they begin to appear. With

Spiny Clot-bur, mowing or hoeing off the plants before they flower will be sufficient, without cultivation, but in the case of the Horehound grubbing seems to be the only available method. It is doubtful whether it makes any difference at what season the work is done, so long as one is careful to catch the plants before they flower, and it may be necessary to repeat the operation three or four times during the first year or two in order to get rid of the pests.

Spartium junceum; Prof. L. H. Pammel, Ames, Iowa. A shrub from southern Europe, much cultivated in California and now spontaneous in many places. The specimen was said to have been found wild near Pacific Grove.

Smilax; John Rock, Niles, Alameda County. A specimen of *Smilax*, the true *Smilax* of the Eastern States, not the plant commonly so called by florists.

Soap-root (Chlorogalum pomeridianum); D. M. Streeter, Biggs, Butte County. With the information that it was the cause of death of 400 sheep in one night. The root is sometimes used by Indians to stupefy fish, but we have not before heard of its being poisonous to stock, and think the trouble must have been caused by some other plant.

Seaside Oats (Uniola paniculata) and *Spreading Brome-grass (Bromus patulus)*; W. S. Tevis, Bakersfield, Kern County. The Seaside Oats is of very little value except as a sand-binder; the leaves are sometimes cropped by cattle, but the grass is too harsh, tough, and dry to be of any importance as a forage plant.

Spreading Brome-grass (Bromus patulus) is a weedy annual species naturalized from southern Europe. Heretofore it has never been considered as of any value as a forage grass, at least not in humid regions, but there is no apparent reason why it should not prove as valuable on dry upland ranges as the Soft Chess has. The latter species, known botanically as *Bromus hordeaceus*, which is a near relative of *Bromus patulus*, has in several dry seasons been the salvation of the stock in various parts of middle California. On account of the fact that *Spreading Brome-grass* is usually considered a weed, the seed is not in the market. The only way to secure seed will be to have men collect it on the range. If seed of *Spreading Brome-grass* can not be obtained we would recommend Soft Chess (*Bromus hordeaceus*, sometimes listed as *Bromus mollis*). When this grass is once established on a range it will take care of itself and will not require resowing, provided that it is allowed to seed itself freely, which means that the range must not be overstocked. Soft Chess spreads with wonderful rapidity if established at a few remote points in different parts of a large range, provided that the conditions are at all favorable for its growth; it forms an abundance of early fall feed and is much relished by cattle.

Trifolium spinulosum; W. M. Turner, Sierraville, Sierra County. A valuable native forage plant, common in Honey Lake Valley and elsewhere east of the Sierra.

Velvet-grass (Holcus lanatus); David Hardy Seed Co., Dallas, Texas. Velvet-grass is a grass of exceedingly poor quality, its only redeeming feature being that it will grow on some of the poorest of sandy soils where scarcely any other grass or grain can be grown. Stock will not touch it so long as they can get something better, and it becomes a troublesome weed in pastures and hay fields.

Virgin's Bower (Clematis ligusticifolia); Dr. J. S. West, Colusa, Colusa County. Dr. West reports that "it is held in repute by the Indians and old settlers as possessing considerable remedial virtue." It is called "Yerba de Chivato" among the Spanish-Californians, and is valued as a remedy for barbed-wire cuts in animals. It is used in the form of a wash, and remarkable cures are said to be effected. The stems and leaves have an acrid, peppery taste, and are chewed for colds and sore throats by the Mendocino County Indians.

Wild Celery (Apium graveolens) and *Milkweed (Asclepias mexicana)*; M. Cody, Cornwall, Contra Costa County. Are "said to be poisonous and many cattle have died hereabouts, and their death has been attributed to the eating of these plants."

ADDITIONAL NAMES AND PLANTS.

Sender.	Common Name.	Botanical Name.
Abraham, C. C.; San Francisco	Mexican daisy	
Alexander, Mrs. G. W.; Moorpark, Ventura County	Goldentop	Lamarckia aurea
Armistead, Dr. H. V.; Newman, Stanislaus County		Euphorbia ocellata
Barber, J. H.; Jackson, Amador County		Matricaria sp.
Bewarder, Henry; San Francisco		Raphiolepis japonica
Bewarder, Henry; San Francisco	The Tarata	Pittosporum eugenoides
Bewarder, Henry; San Francisco	Veronica	Veronica imperialis
Bewarder, Henry; San Francisco	Tawhiwhi	Pittosporum tenuifolium
Bewarder, Henry; San Francisco		Leptosporum laevigatum
Bewarder, Henry; San Francisco	Mimosa	
Bewarder, Henry; San Francisco	Gum cistus	Cistus laniferus
Bewarder, Henry; San Francisco		Cassia tomentosa
Bewarder, Henry; San Francisco		Escallonia rubra

Sender.	Common Name.	Botanical Name.
Bolton, Miss E.; La Honda, San Mateo Co.	.....	<i>Smilacina sessilifolia</i>
Bolton, Miss E.; La Honda, San Mateo Co.	.....	<i>Smilacina amplexicaulis</i>
Bolton, Miss E.; La Honda, San Mateo Co.	.....	<i>Disporum Hookeri</i>
Bolton, Miss E.; La Honda, San Mateo Co.	.....	<i>Clintonia Andrewsiana</i>
Bolton, Miss E.; La Honda, San Mateo Co.	.....	<i>Actaea spicata arguta</i>
Bonner, W. G.; Eureka, Humboldt Co.	Tubers	.....
Brown, C.; Porterville, Tulare County	.....	<i>Eriogonum</i>
Bunney, W. T.; Independence, Inyo Co.	.....	<i>Bromus welldenowii</i> var.
Bunney, W. T.; Independence, Inyo Co.	.....	<i>Celtis</i> sp.
Byram, O. B.; Westminster, Orange Co.	Alkali heath	<i>Frankenia grandifolia</i>
Byram, O. B.; Westminster, Orange Co.	Samphire	<i>Salicornia</i>
Byram, O. B.; Westminster, Orange Co.	Tall tarweed	<i>Centromadia</i>
Byram, O. B.; Westminster, Orange Co.	Common saltbush	<i>Atriplex expansa</i>
Byram, O. B.; Westminster, Orange Co.	Hastate saltbush	<i>Atriplex hastata</i>
Byram, O. B.; Westminster, Orange Co.	Iceplant	<i>Mesembryanthemum crystallinum</i>
Byram, O. B.; Westminster, Orange Co.	Saltwort	<i>Suaeda</i>
Byram, O. B.; Westminster, Orange Co.	Nitrophila	<i>Nitrophila occidentalis</i>
Byram, O. B.; Westminster, Orange Co.	Saltgrass	<i>Distichlis spicata</i>
Campbell, Jas.; Sonoma, Sonoma Co.	Shepherd's needle	<i>Scandix pecten-veneris</i>
Caughrean, Maynerd L.; Helm Bay, Alaska	.....	<i>Fritillaria</i>
Caughrean, Maynerd L.; Helm Bay, Alaska	.....	<i>Clintonia uniflora</i>
Cooke, E. E.; Napa, Napa County	Amaranth	<i>Amaranthus deflexus</i> , L.
Cooke, E. E.; Napa, Napa County	Milkweed	<i>Asclepias mexicana</i>
Crigler, Will; Cazadero, Sonoma County	Nightshade	<i>Solanum umbelliferum</i>
Danner, J. D.; Willows, Glenn County	Coffee-berry	<i>Rhamnus californica</i>
Dawes, J. G.; Fresno, Fresno County	Saltbush	<i>Atriplex bracteosa</i>
Drahms, Rev. A.; San Quentin, Marin Co.	.....	<i>Lochroma lanceolata</i>
Franceschi, Dr. F.; Santa Barbara	Mexican daisy	<i>Erigeron mucronatus</i> , DC.
George, William; Grass Valley, Nevada	.....	.....
County	Wild mustard	<i>Brassica</i> sp.
Grant, Geo. B.; Pasadena, Los Angeles Co.	Wheat	<i>Triticum sativum</i>
Grant, Geo. B.; Pasadena, Los Angeles Co.	Two-row barley	<i>Hordeum distichum</i>
Grant, Geo. B.; Pasadena, Los Angeles Co.	Rye	<i>Secale cereale</i>
Grimes, F. G.; Los Angeles	.....	<i>Suaeda suffrutescens</i>
Henderson, J.; Berkeley, Alameda Co.	.....	<i>Acacia cultriformis</i>
Hopping, Ralph; Kaweah, Tulare Co.	Bunch-grass	<i>Elymus brevifolius</i>
Joseph, M.; Nordhoff, Ventura County	Napa thistle	<i>Centaurea melitensis</i>
Joseph, M.; Nordhoff, Ventura County	Wild lettuce	<i>Lactuca scariola</i>
Joseph, M.; Nordhoff, Ventura County	Wild heliotrope	<i>Heliotropium curassavicum</i>
Kerz, A.; Ramona, San Diego County	Lotus	.....
Kidder, Miss L.; Berkeley, Alameda Co.	Silver-tree	<i>Leucadendron argenteum</i>
Mackie, W. W.; Berkeley, Alameda Co.	.....	<i>Fuchsia speciosa</i> , Hort.
Merritt, Mr.; Helix, San Diego County	Australian saltbush	<i>Atriplex semibaccata</i>
Peasley, A. E.; Hollister, San Benito Co.	Velvet-grass	<i>Holcus lanatus</i>
Pennell, Suydam & Co., San Francisco	Chickweed	<i>Stellaria media</i> , L.
Pond, Dr. M. B.; Napa, Napa County	Soap plant	<i>Chenopodium californicum</i>
Redemeyer, A. F.; Ukiah, Mendocino Co.	Jerusalem oak	<i>Chenopodium botrys</i>
Rice, P. J.; Fresno, Fresno County	Tall tarweed	<i>Centromadia</i> sp.
Rice, P. J.; Fresno, Fresno County	Saltgrass	<i>Distichlis spicata</i>
Rice, P. J.; Fresno, Fresno County	Saltbush	<i>Atriplex</i> sp.
Shirrell, Mrs. Alma; Santa Cruz	Dakota vetch	<i>Lotus americanus</i>
Shutt, William; Santa Monica	.....	<i>Eucalyptus platypus</i>
Shutt, William; Santa Monica	.....	<i>Acacia penninervis</i>
Swan, Rev. G.; Berkeley, Alameda Co.	.....	<i>Ceanothus foliosus</i>
Steele, G. H.; Pescadero, Santa Cruz Co.	Bronco-grass	<i>Bromus maximus</i> (Gussoni)
Gilly, Mr.; Berkeley, Alameda County	Candy-grass	<i>Eragrostis minor</i>
Trumbull & Beebe, San Francisco	Orchard-grass	<i>Dactylis glomerata</i>
Wedd, Miss S. A.; Berkeley, Alameda Co.	.....	<i>Mesembryanthemum crystallinum</i>
Weaver, Mrs. S. J.; San Francisco	Corn flower	<i>Centaurea cyanus</i>

JULY, 1902, TO JUNE, 1903.

By H. M. HALL.

Argan-tree (*Argania sideroxylon*); Miss S. L. Adams, Point Loma, San Diego County. This tree is a native of Morocco, where it forms extensive forests. The wood is hard and much used on account of its strength. The oil expressed from the seeds is used as a substitute for olive oil. In England it has been grown in greenhouses to a height of 20 feet, and would probably grow out of doors in San Diego County. The soil in which the seeds are planted should be kept moist but not wet.

Aleurites cordata; Appraiser of Customs, San Francisco. Nuts said to be used by the Chinese for extraction of nut oil. These are the nuts of *Aleurites cordata* of Japan, China, and southeast Asia. It is much cultivated in China as one of the Candle-nut

trees (*Euphorbiaceæ*) and is closely related to *A. moluccana*, a widely distributed Candle-nut of the tropics. The nuts are strung on sticks by the natives and used as candles. The oil expressed from the seed is used for illumination. While the oil of certain Candle-nuts is used medicinally, we find no record of such a use for this particular species.

Arrow-weed (*Pluchea sericea*), *Mesquite Beans*, *Screw Beans*, and *Sea Blite*; L. C. Schultze, Hedges, San Diego County. 1. *Arrow-weed* (*Pluchea sericea*). This plant is probably not eaten by any animal.

2. *Mesquite Beans* (*Prosopis juliflora*). The Indians are very fond of these, grinding pod and all into an imperfect meal, which is very rich in nutriment. Horses, cattle, sheep, etc., eat *Mesquite Beans* when gathered for them, and Indian ponies acquire the ability of gathering them without being scratched by the stout spines with which the stems are armed. Mr. Schultze reports that in his vicinity animals have been killed by eating the wet beans. The poisoning was probably due to something else or to the packing of food in the alimentary canal, since with water the meal forms a sticky, pasty mass. Bees make very good honey and an abundance of it from the *Mesquite*, but it is dark-colored.

3. *Screw Bean* (*Prosopis pubescens*) is of the same genus as the *Mesquite*. They belong to the Leguminosæ, or *Pea Family*, section *Mimoseæ*, of which the *Sensitive Plant* is the best known member.

4. *Sea Blite* (*Suaeda Torreyana*). No animal, so far as we know, will eat *Sea Blite*.

Common Wild Mustard (*Brassica campestris*), *Soap Plant* (*Chenopodium californicum*), and *Burning Bush* (*Euonymus japonica*); Pacific Rural Press, San Francisco. *Common Wild Mustard* (*Brassica campestris*) and *Rape* (*Brassica napus*) are distinguished by the first leaves, those of the *Mustard* being hairy on the back, while the first leaves of the *Rape* are perfectly smooth. The specimens sent are too old to determine this point. It is used in Europe to fatten lambs for market.

Soap Plant (*Chenopodium californicum*), for determination and asks if it is poisonous. Probably not, since it has never been so reported, although it is common in California. None of the plants belonging to the same family are known by us to be poisonous. The Indians use it not only as a substitute for soap, but also as a pot herb. It might, however, contain some poison which is dissipated on heating.

Burning Bush (*Euonymus japonica*), a valuable ornamental shrub, not rare in cultivation in California; noted for its bright scarlet berries, which contrast well with the deep green foliage.

Blue Gum (*Eucalyptus globulus*); R. Thompson, San Francisco. This, the ordinary gum, has given the best satisfaction as fuel so far and is recommended. Young trees are easily had; they grow rapidly, and the wood is of good quality. The only objection is that the wood does not split easily. The true *Red Gum* (*Eucalyptus rostrata*) is also good, but the wood is fully as difficult to split as that of the *Blue Gum* and the tree is not so rapid a grower.

Crab-grass (*Panicum sanguinale*); Edward C. Viera, Moss Landing, Monterey County. 1. The well-known *Crab-grass* (*Panicum sanguinale*), a troublesome weed in some parts. The grass dies quickly when cut; but if after cutting it is wet by rains or heavy fogs its value for hay is almost wholly destroyed. 2. *Eragrostis neo-mexicana*, known in New Mexico as *Crab-grass*, is reported as of value as a hay grass.

Corn Spurry (*Spergula arvensis*); W. I. Newcomb, Sebastopol, Sonoma County. This plant is reported valuable in holding rather loose, sandy soil together in time of rain, as it forms a dense green covering and breaks the force of the raindrops and streams. It is readily eaten by stock and increases the flow of milk.

Chick Pea (*Cicer arietinum*); J. H. Webster, San Francisco. Seed of *Chick Pea* (*Cicer arietinum*) from India for determination. This is much used in India and the Mediterranean region as an article of food, but is little cultivated in the United States.

Dyer's Wood (*Isatis tinctoria*); J. H. Barber, Jackson, Amador County. Reports six Persian sheep as having been poisoned, and sends the following to see if any of them might be responsible: *Barnyard-grass* (*Panicum crus-galli*), a cultivated *Vetch* (*Vicia* sp.), *Eriogon canadensis*, *Tumble-weed* (*Amaranthus albus*), *Rough Pigweed* (*Amaranthus retroflexus*), *Dyer's Wood* (*Isatis tinctoria*). This list was referred to Mr. V. K. Chesnut, in charge *Poisonous Plant Investigations* at the U. S. Department of Agriculture, who reports that the *Isatis* is under suspicion. He says, "Like *Indigofera* it yields isatin or indican, which in turn breaks up under certain conditions into indigo. I do not know that indican of itself is poisonous, but indigo is toxic, the symptoms for poisoning being diarrhoea, vomiting, and a sort of colic of the kidneys." Mr. Chesnut also reports that certain species of *Amaranthus* accumulate a considerable amount of niter in their stems under certain conditions, and this is, of course, poisonous in considerable doses. Neither of the two species mentioned above has been examined.

Dodder (*Cuscuta subinclusa*), *Manna Gum* (*Eucalyptus viminalis*), and *Barnyard-grass* (*Panicum crus-galli*); J. C. McCubbin, Reedley, Fresno County. *Common Dodder* (*Cuscuta subinclusa*) is a troublesome weed. The only method of eradication from an *Alfalfa* field is to cover with straw and burn and then plow and reseed. Great care should be exercised in the purchase of *Alfalfa* seed, to see that it is free from the seed of *Dodder* and similar weeds.

English Plantain (*Plantago lanceolata*); M. Frost, Point Reyes, Marin County. As this has a long tap-root which is capable of sending up new shoots when cut off, it can not be killed by ordinary hoeing. By continual cultivation the tops may be kept from growing and the roots will eventually starve to death, as they are dependent on nourishment received from the air through the leaves as well as upon that received from the soil.

Festuca; W. H. Ward, Morgan Hill, Santa Clara County. This is a species of *Festuca*, but the specimen is too immature for exact determination.

Helvella lacunosa; D. J. Osborne, San Francisco. This is an edible fungus, common beneath pines throughout California. Determined by Professor Setchell.

India Hemp (*Apocynum cannabinum*); Ira Mournian, Bethany, San Joaquin County. This is a poisonous plant, but will be seldom eaten if there is a sufficiency of other food. The remedy recommended is an emetic, such as soda in water, and the animal should be forced to swallow lard or some other form of grease, by rubbing it into its mouth. Other poisonous plants of San Joaquin County are Poison Hemlock (*Conium maculatum*), Water Hemlock (*Cicuta bolanderi*), and the Milkweeds (*Asclepias* sp.), descriptions of which will be found in any California botany.

Kurrajong (*Sterculia diversifolia*); J. Q. Adams, Soldiers' Home, Los Angeles County. This has some value as a shade tree for streets and avenues in California where it has been introduced, but on account of its small size it is better adapted to lawns and for use as an ornamental shrub. Because of its glossy foliage it does not easily become dusty, but remains green throughout the year.

Loose-strife (*Lythrum californicum*); J. H. Matthews, Healdsburg, Sonoma County. This weed is coming into middle and southern California and we have also received it from Newark, Suisun, etc. It is an inhabitant of low, moist land, a native of California, and not usually considered as being an exceedingly troublesome weed, although it may rapidly become a nuisance on lands adapted to its growth.

Lion's Ear (*Leonotis leonurus*); R. B. Powell, Eureka, Humboldt County. This plant is a member of the Mint family, and a native of South Africa.

Narrow-leaved Milkweed (*Asclepias mexicana*), also *Bristly Ox-tongue* (*Picris echioides*); W. Fischer, Mountain View, Santa Clara County. Mr. Fischer reports that these plants are suspected of poisoning sheep. The Milkweed is undoubtedly poisonous to stock and it is probably responsible for the poisoning in this case. The Ox-tongue has been recently introduced from Europe, and we find no record of its being poisonous, although it belongs to a group of plants, the juice of which is usually poisonous.

Mallow (*Malva borealis*); Postmaster at Largo, Mendocino County. There are three Mallows, all introduced weeds, more or less common in California. They are not usually considered as being so troublesome as the Morning-glory or Bind-weed, since they do not multiply by creeping roots. The stems arise from a single tap-root, and if this is killed the weed ceases to grow. There is no special method of eradication, but it should be prevented from seeding. By persistent cultivation during the summer and autumn the young plants may be kept down.

Milkweed (*Asclepias* sp.); A. Sharr. The material is too scant for accurate determination. Mr. Sharr reports that lambs eat it when hungry and die from it after being sick from two to five days, while old sheep seldom eat it. Bees are also poisoned when gathering honey from it. This plant should be destroyed when young, if possible.

Blue-flowered Nightshade (*Solanum umbelliferum*); W. J. Alderman, Grass Valley, Nevada County. This species has the same properties as the Deadly Nightshade (*S. nigrum*), to which it is closely related. A chemical analysis of the stems, leaves, and berries has been made at the University of California, and an alkaloid known as solanin was found in all these parts. It is the same poisonous substance that occurs in young potato sprouts. Although the berries are not palatable, young children sometimes eat them, and one case of poisoning by the berries has been reported. The plants are difficult to eradicate, since new shoots may be sent up from the roots when the tops are cut off. The whole plant should be grubbed out, care being taken to remove and burn as much of the root as possible. If then the new shoots are persistently killed as fast as they appear, the roots will eventually die.

Ookow (*Brodiaea congesta*); Edith Wilbur, Yuba City, Sutter County. This is commonly known as "Ookow" and also, though erroneously, as "Wild Hyacinth." Not usually considered a pest in grain fields.

Panicum pruriens; Mrs. E. A. Abbott, Los Angeles. This plant is common in Hawaii, and is highly prized as a forage plant for cattle and horses. It would probably do well in southern California.

Purple Cut-weed (*Gnaphalium purpureum*); Arthur Goodall, San Francisco. It belongs to the Composite, or Sunflower family, and is closely related to the Edelweiss of the Alps. It is a common plant in California in open places, especially in damp soil along margins of ponds and marshes. It reproduces by seed, but it is doubtful if it is kept in stock by seedsmen. We do not find it listed in any of the catalogues at hand.

Palo de Hierro (Olneya tesota); A. J. Pieters, Washington, D. C. This is the Ironwood of the Indians; it is a common tree in some parts of the Colorado Desert, and is remarkable for its very hard and heavy wood. It is used by the Indians in making tool handles, arrows, etc.

Sleepy-grass (Stipa vaseyi); German Imperial Consul, San Francisco. It ranges from the San Jacinto Mountains in southern California eastward in the desert region to New Mexico. It is much more common in Arizona and New Mexico than it is in this State. It is a well-established fact that when horses feed on it freely it has the effect of making them drowsy, and in some instances they have been known to sleep continuously for several days. This is probably due to the peculiar chemical composition of the grass, but it has never been investigated.

Solanum verbascifolium; E. L. Head, San Francisco. It is a native of the East and West Indies, Mexico, South America, and Australia. We have no record that any part of the plant has any use except the wood, which is of a yellow color, easily worked, and of a close grain. According to Professor Maiden, Government Botanist of New South Wales, it is frequently used in Australia. Leaves, green fruit, etc., of related species contain solanin, a poisonous alkaloid. This is absent in ripe fruits. The berries are too rich in seeds and too deficient in pulp to be of much value as a food.

Silk-tassel Tree (Garrya elliptica); C. A. G. Weymouth, Lick Observatory, Santa Clara County. The wood when freshly cut is white, but on exposure it becomes beautifully mottled with blue and takes a good polish. This is due to the oxidation of certain tannins in the sapwood.

Velvet-grass (Holcus lanatus); William J. Ball, Auburn, Placer County. This is rapidly being introduced from Europe and is a troublesome and persistent pest. If in large quantities, mow off and burn it before seeding. Small patches should be uprooted. If allowed to spread it chokes out valuable forage plants.

Yerba Santa, or Mountain Balm (Eriodictyon californicum); M. B——, Woodland, Yolo County. Common throughout the State, chiefly in the mountains at middle and lower altitudes. The leaves are balsamic-resiniferous, and are variously used in domestic medicine. A tea made by steeping the leaves and also an infusion in spirit are used as a tonic and for colds and sore throat by Spanish-Californians and Indians. The Coahuilla Indians call the plant tan-wi-vel, and use the leaves for a poultice or liniment. The pulverized leaves are bound upon the sores of both men and beasts, and the sore parts, as well as the limbs when fatigued, are bathed with a strong decoction. According to Mr. V. K. Chesnut, the Mendocino Indians call it til-at-mil, and value it more highly than any other of the native plants for medicinal purposes. Besides the uses mentioned above they find it valuable as a blood purifier, a cure for rheumatism, consumption, and catarrh. It is conceded to be one of the best medicines recently admitted into regular official use. It has been recently admitted into the U. S. Pharmacopoeia, as being of special value in chronic subacute inflammation of the bronchial tubes, and as a means of disguising the taste of quinine.

Yellow Melilot or Yellow Sweet Clover (Melilotus indica); Vogeler & Co., Salt Lake City, Utah. Plant gathered in California. It is not infrequent impurity in Alfalfa seed, but is not to be feared, since it seldom becomes a troublesome weed in hay fields.

ADDITIONAL NAMES AND PLANTS.

Sender.	Common Name.	Botanical Name.
Anderson, L.; San Luis Obispo	.....	<i>Pittosporum tenuifolium</i>
Aram, W. F.; Redding, Shasta County	Turpentine weed	<i>Trichostema laxum</i>
Bishop, R. K.; Orange, Orange County	.....	<i>Ceanothus crassifolius</i>
Bolton, E. E.; Coyocan, Mexico	.....	<i>Tillandsia</i> sp.
Brandt, R.; Fishrock, Mendocino Co.	.....	<i>Calochortus maweanus</i>
Brankonm, Geo.; Corning, Tehama Co.	Green fruits	.....
Brubaker, Mrs. B. H.; Corning, Tehama Co.	.....	<i>Tegasaste</i>
Butler, O.; Berkeley, Alameda County	.....	<i>Veronica speciosa</i>
Butler, O.; Berkeley, Alameda County	.....	<i>Veronica traversii</i>
Cilley, B.; Covina, Los Angeles County	Morning-glory	<i>Convolvulus</i> sp.
Clarke, W. T.; Berkeley, Alameda County	.....	<i>Baccharis douglasii</i>
Clarke, W. T.; Berkeley, Alameda County	.....	<i>Epilobium paniculatum</i>
Clarke, W. T.; Berkeley, Alameda County	.....	<i>Artemesia heterophylla</i>
Cookey, A.; Marysville, Yuba County	Crab-grass	<i>Panicum sanguinale</i>
Curry, R. J.; Dixon, Solano County	Yellow Star thistle	<i>Centaurea solstitialis</i>
Currey, R. J.; Dixon, Solano County	Star thistle	<i>Centaurea calcitrapa</i>
Deaner, S. C.; Woodland, Yolo County	Acacia	.....
Deaner, S. C.; Woodland, Yolo County	Bottle-tree	.....
Dunning, W. B.; San Francisco	Wild barley-grass	<i>Hordeum murinum</i>
Dunning, W. B.; San Francisco	Salt-grass	<i>Distichlis spicata</i>
Dunning, W. B.; San Francisco	Red-brome	<i>Bromus rubens</i>
Dunning, W. B.; San Francisco	Soft chess	<i>Bromus hordeaceus</i>
Dunning, W. B.; San Francisco	Alfilerilla	<i>Erodium cicutarium</i>

Sender.	Common Name.	Botanical Name.
Dunning, W. B.; San Francisco	Bear-grass	<i>Stipa</i>
Dunning, W. B.; San Francisco	Yerba de vibora	<i>Daucus pusillus</i>
Dunning, W. B.; San Francisco	Bur-clover	<i>Medicago denticulata</i>
Dunning, W. B.; San Francisco	Tall tarweed	<i>Centromadia</i>
Dunning, W. B.; San Francisco	Bronco-grass	<i>Bromus maximus</i>
Dunning, W. B.; San Francisco	Wild oats	<i>Elymus</i>
Durham, J.; Irvington, Alameda County	Stink bells	<i>Fritillaria agrestis</i>
Easter, L.; Oakland, Alameda County		<i>Barosma crenulata</i>
Easter, L.; Oakland, Alameda County		<i>Barosma serratifolia</i>
Easter, L.; Oakland, Alameda County		<i>Barosma betulina</i>
Edwards, C. A.; Berkeley, Alameda Co.	Soft brome	<i>Bromus hordeaceus</i>
Edwards, C. A.; Berkeley, Alameda Co.	Bronco-grass	<i>Bromus maximus</i>
Edwards, C. A.; Berkeley, Alameda Co.	Goldentop	
Evens, R. J.; Palmdale, Los Angeles Co.	Nightshade	<i>Solanum xanti</i>
Evens, R. J.; Palmdale, Los Angeles Co.		<i>Lepidospartum squamatum</i>
Foster, E. H.; Tremont, Solano County	Bronco-grass	<i>Bromus maximus</i>
Garibaldi, F. A.; Mendocino	Scrub pine	<i>Pinus contorta</i>
Gedge, C. J.; Oakland		<i>Banksia integrifolia</i>
Gerberding, E. O.; Hueneme, Ventura Co.	Field sorrel	<i>Rumex acetosella</i>
Gilbert, Mrs. E. J. C.; Berkeley, Alameda County		<i>Oenothera albicaulis</i>
Gilbert, O. B.; Burlington, Vermont	Shrubby cinquefoil	<i>Potentilla fruticosa</i>
Gilman, M. F.; Banning, Riverside Co.		<i>Dalea emoryi</i>
Gilman, M. F.; Banning, Riverside Co.		<i>Dalea schottii</i>
Gilman, M. F.; Banning, Riverside Co.		<i>Beleperone californica</i>
Goddard, P. E.; Berkeley, Alameda Co.	Mountain mint	<i>Koelia californica</i>
Goethe, W. N.; Bakersfield, Kern Co.		<i>Prunus caroliniana</i>
Goodhart, Miss K.; Leon, Riverside Co.	Chocolate lily	<i>Fritillaria biflora</i>
Hale, Wm.; San Francisco		<i>Ephedra</i> sp.
Hays, J. A.; Harbin Springs, Lake Co.	Chinquapin	<i>Castanea chrysophylla</i>
Horst Bros.; Wheatland, Yuba County		<i>Medicago apiculata</i>
Huntley, D. B.; Rhodesia, South Africa		<i>Podocarpus</i>
Huntley, D. B.; Rhodesia, South Africa		<i>Canna</i>
Kelley & Henry, San Francisco	Seed of rye-grass	<i>Lolium perenne</i>
Keown, Mr.; Berkeley, Alameda County		<i>Acacia arabica</i>
Larson, L. M.; Lathrop, San Joaquin Co.	Spanish clover	<i>Lotus americanus</i>
Lawrence, G. E.; Lodi, San Joaquin Co.	Rough pigweed	<i>Amaranthus retroflexus</i>
Lawrence, G. E.; Lodi, San Joaquin Co.	Crab-grass	<i>Panicum sanguinale</i>
Lawrence, G. E.; Lodi, San Joaquin Co.	Barley yard-grass	<i>Panicum crus-galli</i>
Mackie, W. W.; Berkeley, Alameda Co.	Scrub oak	<i>Quercus dumosa</i>
Mackie, W. W.; Berkeley, Alameda Co.	Curl-leaf scrub oak	<i>Quercus dumosa bullata</i>
Mackie, W. W.; Berkeley, Alameda Co.	Black oak	<i>Quercus californicus</i>
Mackie, W. W.; Berkeley, Alameda Co.	Blue oak	<i>Quercus douglasii</i>
Mackie, W. W.; Berkeley, Alameda Co.	Maul oak	<i>Quercus chrysolepis</i>
Mackie, W. W.; Berkeley, Alameda Co.	Post oak	<i>Quercus garryana</i>
Mackie, W. W.; Berkeley, Alameda Co.	Juniper	<i>Juniperus occidentalis</i>
Mackie, W. W.; Berkeley, Alameda Co.	Dogwood	<i>Cornus pubescens</i>
Mackie, W. W.; Berkeley, Alameda Co.		<i>Arctostaphylos nevadensis</i>
Mackie, W. W.; Berkeley, Alameda Co.		<i>Iris douglasiana</i>
Mackie, W. W.; Berkeley, Alameda Co.		<i>Iris macrosiphon</i>
Mackie, W. W.; Berkeley, Alameda Co.	Service berry	<i>Amelanchier alnifolia</i>
Mackie, W. W.; Berkeley, Alameda Co.	Dwarf meadow-sweet	<i>Holodiscus discolor dumosa</i>
Mackie, W. W.; Berkeley, Alameda Co.		<i>Philadelphus gordonianus</i>
Mackie, W. W.; Berkeley, Alameda Co.		<i>Arctostaphylos glauca</i>
Mackie, W. W.; Berkeley, Alameda Co.	Pacific yew	<i>Taxus brevifolia</i>
Mackie, W. W.; Berkeley, Alameda Co.	Coffee-berry	<i>Rhamnus californica tomentella</i>
Mackie, W. W.; Berkeley, Alameda Co.		<i>Ceanothus cuneatus</i>
MacDonald, Mrs.; Poway, San Diego Co.		<i>Ixia paniculata rochenensis</i>
Manning, Mrs. M. H.; Fort Bidwell, Modoc County		<i>Bigelovia graveolens</i>
Mattern, Mrs. F. W.; Los Angeles		<i>Phytolacca dioica</i>
Mellen, Mrs. H.; Beaumont, Riverside Co.	Bronco-grass	<i>Bromus maximus</i>
Minthorn, T. W.; Los Angeles	Maiden-hair fern	<i>Adiantum emarginatum</i>
Minthorn, T. W.; Los Angeles	Slender arrow-grass	<i>Triglochin concinna</i>
Minthorn, T. W.; Los Angeles	Tamarisk	<i>Tamarix indica</i>
Minthorn, T. W.; Los Angeles		<i>Dichondra repens</i>
Myers, R. H.; Hanford, Kings County	Yerba reuma	<i>Frankenia grandifolia</i>
Myers, R. H.; Hanford, Kings County		<i>Nitrophila occidentalis</i>
Myers, R. H.; Hanford, Kings County	Salt-grass	<i>Distichlis spicata</i>
Myers, R. H.; Hanford, Kings County	Slender wild rye	<i>Elymus triticoides</i>
Pammel, L. H.; Ames, Iowa		<i>Colutea arborecens</i>
Pillsbury, A. J.; Tulare, Tulare County		<i>Atriplex bracteosa</i>
Putnam, E. W.; San Francisco	Salt-grass	<i>Distichlis spicata</i>
Russ, Z. & Sons, Eureka, Humboldt Co.	Three specimens of grass	

Sender.	Common Name.	Botanical Name.
Rinder, T.; San Luis Obispo	Nightshade	<i>Solanum xanti</i>
Rinder, T.; Monterey	Rattlesnake-weed	<i>Daucus pusillus</i>
Sanford, J. A.; Stockton, San Joaquin Co. ....	.....	<i>Anaphalis margaritacea</i>
Sanford, J. A.; Stockton, San Joaquin Co.	Gnaphalium decurrens	<i>californicum</i>
Sanford, J. A.; Stockton, San Joaquin Co. ....	.....	<i>Habenaria elegans</i>
Sanford, J. A.; Stockton, San Joaquin Co. ....	.....	<i>Salix</i> sp.
Sanford, J. A.; Stockton, San Joaquin Co. ....	.....	<i>Potentilla multijuga</i>
Sanford, J. A.; Stockton, San Joaquin Co. ....	.....	<i>Salix sitchensis</i>
Sanford, J. A.; Stockton, San Joaquin Co. ....	.....	<i>Gilia aggregata</i>
Sanford, J. A.; Stockton, San Joaquin Co. ....	.....	<i>Chrysothamnus</i> sp.
Shaffer, J. S.; Defender, Amador Co.	Wild ginger	<i>Asarum hartwegi</i>
Shelley, H. O. H.; Cupertino	Black bindweed	<i>Polygonum convolvulus</i>
Smyer, S. E.; Le Grand, Merced Co.	Teosinte	<i>Euchlæna</i> sp.
Stocking, Miss M. L.; Berkeley, Alameda County .....	.....	<i>Perezia thurberi</i>
Wales, F. H.; Imperial, San Diego Co.	Barnyard-grass	<i>Panicum crus-galli</i>
Weber, A. H.; San Francisco .....	.....	<i>Streptanthus glandulosus</i>
Westfall, J. C.; Sycamore, Colusa Co.	Italian ray-grass	<i>Lolium multiflorum</i>
Wilkinson, E.; Geyserville, Sonoma Co.	Rice-root lily	<i>Fritillaria mutica</i>
Wood, Curtis & Co., Sacramento	Japanese millet	<i>Chaetochloa</i> sp.
Young, David; Stockton, San Joaquin Co.	Sweet clover	<i>Melilotus gracilis</i>

CENTRAL EXPERIMENT STATION.

Berkeley, Alameda County.

DISTRIBUTION OF SEEDS, PLANTS, CUTTINGS, ETC.

By EDWARD J. WICKSON.

Our last report explained our method of plant and seed distribution and the coöperation of our work with that of the Bureau of Plant Industry of the United States Department of Agriculture. An outline of the work for the last eighteen years appears in the following tabulation:

OUNCES OF SEEDS DISTRIBUTED.

	1886-97.	1897-8.	1898-9.	1899-0.	1900-1.	1901-2.	1902-3.
Cereals	21,896			2,104	2,064	812	730
Fiber plants	3,332	240					
Forage plants	30,602	769	2,207	2,831	658	1,394	920
Plants for green-manuring	5,948	384	864	2,410	450	899	1,375
Vegetables	12,729	689	4,043	2,399	1,013	408	532
Trees	4,628	1,726	1,084	1,869	552	694	551
Miscellaneous	4,353	76	172				76

NUMBER OF PLANTS AND SCIONS.

	6,938		626	134			
Trees (30 kinds)	6,938		626	134			
Fiber plants	1,530						
Forage plants (roots)	18,843	800					
Grapes, figs, and olives	48,190	4,397	590	895			3,491
Mulberries, osier willows	13,105		1,190				
Miscellaneous	4,842	729	845	342			1,988
Strawberries (10 kinds)				2,649			

EXTENT OF DISTRIBUTION FOR TEN YEARS.

	1893-4.	1894-5.	1895-6.	1896-7.	1897-8.	1898-9.	1899-0.	1900-1.	1901-2.	1902-3.
Number of applicants..	578	925	1,477	1,169	637	846	995	337	497	540
Packages sent by mail	761	1,163	2,027	1,446	861	984	1,566	381	489	763
Packages by express ..	56	12	54	171	81	43			2	4
Offices	329	382	486	427	302	360	436	197	245	253
Counties reached	48	53	54	52	51	52	52	48	46	50

FINANCIAL STATEMENT FOR EIGHT YEARS.

	1895-6.	1896-7.	1897-8.	1898-9.	1899-0.	1900-1.	1901-2.	1902-3.
<i>Receipts.</i>								
Cash from applicants..	\$476 62	\$407 27	\$213 39	\$310 83	\$393 97	\$103 79	\$102 97	\$223 06
Assistance from Agr. Dept. of Univ.	23 50	-----	19 00	-----	-----	-----	-----	-----
Total receipts	\$500 12	\$407 27	\$232 39	\$310 83	\$393 97	\$103 79	\$102 97	\$223 06
<i>Expenditures.</i>								
Packing material for seeds	\$25 80	\$12 70	\$11 00	\$12 30	\$17 05	\$4 70	\$8 95	-----
Packing material for plants	27 15	48 30	22 60	15 85	27 15	-----	-----	\$19 40
Postage, cartage, etc. ..	148 21	100 41	61 20	66 38	106 98	24 52	24 65	48 57
Stationery	13 55	13 28	6 23	7 90	7 15	7 20	10 60	6 35
Wages	251 25	219 02	*123 38	*190 40	212 23	67 33	58 65	139 19
Total expense	\$465 96	\$393 71	\$224 41	\$292 83	\$370 56	\$103 75	\$102 85	\$213 51
Cash (unfilled orders) returned	34 16	13 56	7 98	18 00	23 41	04	12	9 55
	\$500 12	\$407 27	\$232 39	\$310 83	\$393 97	\$103 79	\$102 97	\$223 06

*\$30.80 of amount due in 1897-8 was paid in 1898-9.

REPORTS ON VARIOUS SEEDS AND PLANTS INCLUDED IN THE UNIVERSITY DISTRIBUTION.

By EDWARD J. WICKSON.

It is desirable to constantly remind those who receive seeds or plants through our distribution, that the public interest is served by reporting the results of their trial of these plants. For this purpose we repeat a few sentences used in our last report, viz.:

Those who receive seeds or plants from the Station assume the obligation of reporting the results of their trial. The obligation is not discharged as fully as is desirable, and yet very interesting and important data are secured in this way. It is possible that this publication may suggest to some readers that they also have experience and observation in the same line which they should communicate to us. Sometimes the most important conclusions are secured through these deferred reports, because they cover long periods of time and, especially in the growth of trees, enable the correspondent to give measurements which determine not only the adaptation of the plant, but also its rate of growth or productiveness. Let it be understood, then, that it is never too late to make a report upon perennial plants.

It will be noticed in some of the following reports that notes of the growth of trees are given after several years. There are probably in different parts of the State many fine specimens of which measurements and photographs would be very acceptable in determining their availability to later planters.

TREES AND SHRUBS.

THE EUCALYPTS.—Several species of Eucalyptus are gaining rapidly in popularity in California, and many others are deserving of wider attention. Bulletin No. 147 of this Station gives very interesting data upon their growth at our forestry substations at Chico and Santa

Monica. The following are notes from those who have reported concerning the seed received from us:

George B. Pearce, Jr., Paradise, Butte County.—*Eucalyptus rostrata* seed germinated and I have a few nice little trees. I have a very fine tree of *Eucalyptus citriodora*, or lemon-scented. During the first winter it was killed to the ground, but sent up a sprout in the spring and made a fine growth that year. The following winter only a little of the top was killed, as has been the case since. The present top is, I believe, three years old, and about 20 feet high. It is greatly admired, and I feel repaid for all my efforts to grow the *Eucalyptus*.

Albert F. Etter, Ettersberg, Humboldt County.—Half a dozen Blue Gum *Eucalypti* out of one hundred survived the frost of last winter.

H. Overacker, Jr., St. Helena, Napa County.—The *Eucalyptus* seeds planted a year ago have made very good growth; *Eucalyptus rostrata* is 4 feet high, and *Eucalyptus leucosylon* 3 feet high.

L. L. Guss, Oakley, Contra Costa County.—*Eucalyptus gunnii*, three years old from seed, is 2 feet in height; hardy, but a slow grower. *E. leucosylon*, three years old from seed, is 8 feet in height and 3 inches in diameter; a hardy tree and good grower, but requires good soil. *E. robusta*, one year old from seed, is 2 feet in height; it will need irrigation in order to do well.

C. C. Wulff, Watsonville, Santa Cruz County.—Swamp Mahogany seed produced thirty fine trees, which thrive well.

S. H. Haskell, Porterville, Tulare County.—*Eucalyptus polyanthema* has made a fair growth.

Alfred Day, Chatsworth Park, Los Angeles County.—*Eucalyptus polyanthema* seed sprouted and the plants are now looking fine. *Eucalyptus calophylla* seed all sprouted, and I am very well pleased with the plants.

Mrs. C. E. Foss, Alpine, San Diego County.—*Eucalyptus rostrata* has succeeded best of the *Eucalypts*. We have trees $2\frac{1}{2}$ feet high, some of which have been injured by the cold and frost. I have one *leucosylon*, one *resinifera*, and a few *gunnii*; also have one *polyanthema*, which grows well and is handsome. The others are very slender. Dr. G. Nichols has a *polyanthema* which is very much admired. Swamp Mahogany (*E. robusta*) seed came up and the plants grew well, but the cold has injured them so that I doubt if they will recover.

THE ACACIAS.—The following notes are significant of the suitability of the species approved. There are also important notes on the growth of *Acacias* in other parts of the State in Bulletin No. 147, to which allusion was made above:

Albert F. Etter, Ettersberg, Humboldt County.—*Acacia mollissima floribunda* seems hardy and does well so far.

L. L. Guss, Oakley, Contra Costa County.—*Acacia decurrens* grown from seed, now eleven years old, is 16 inches in diameter and 30 feet high, with a spread of top of 30 feet. This tree is on high ground and is never injured by cold. Another tree of the same variety, planted on low ground, attained a height of 30 feet, with a spread of top of 12 feet; diameter, 9 inches; it was badly injured by cold at 21° . *Acacia cyanophylla*, two years old from seed; height, 4 feet; not hardy, but will grow in sheltered places.

Louis Schiemann, Sacramento.—*Acacia pycnantha* which I planted produced about a dozen plants. Those of 18 inches in height were planted out on my ranch near Lodi last month (February), but the frost killed all the leaves; the stems, however, are green one inch from the ground and will probably come up. Six plants in my garden here are only six inches high now, but were not killed by frost.

Jacob Maechtle, Covina, Los Angeles County.—Succeeded splendidly with *Acacia* seeds (*pycnantha* and *cyanophylla*) as well as with *Sterculia diversifolia* and *Araucaria brasiliensis*, but lost many in transplanting, distributing my surplus to neighbors and friends.

CONSTANTINOPLE ACACIA (*Albizzia julibrissin*).—This is the pink-flowered acacia of travelers in Asia Minor. Flowers form in large panicles, and remain a long time in bloom. Tree grows 30 or 40 feet high, and is hardy in parts of California. The largest trees in the State are probably those on Rancho Chico, residence of the late General

Bidwell, from which the seeds offered were obtained. Seedlings occasionally show white instead of pink flowers.

George B. Pearce, Paradise, Butte County.—The seed of Constantinople *Acacia* sprouted and I now have several nice little trees.

Grant Wallace, Pomelo, Sacramento County.—Constantinople *Acacia* made slow growth, about 8 inches high first season, as against $3\frac{1}{2}$ feet for *A. lophantha* and *A. melanoxylon*. It seems to be deciduous.

L. L. Guss, Brentwood, Contra Costa County.—The Constantinople *Acacia*, four years from the seed, is $3\frac{1}{2}$ feet high and 1 inch in diameter. It is a slow grower, but a hardy and beautiful tree.

EDWARDSIA (Edwardsia grandiflora).—This is a very beautiful New Zealand tree. It is a deciduous, free-flowering, small tree, with attractive and characteristic foliage. The flowers are deep golden, tubular, 2 inches long, appearing in pendulous racemes. It is one of the best of the *Sophora* group. Introduced to California by Dr. S. M. Curl, of New Zealand. Half-hardy, does not need much water. It is a fine sidewalk tree, and probably long-lived.

Grant Wallace, Pomelo, Sacramento County.—*Edwardsia* and Soap-Tree are making slow growth.

Mrs. E. Shaw, Sebastopol, Sonoma County.—*Edwardsia grandiflora* seeds made a good growth, and are handsome plants.

Thomas W. Cowan, Pacific Grove, Monterey County.—A fair proportion of *Edwardsia* seed germinated, and the plants are now from 6 to 7 inches high.

J. E. E. Nichols, Pomona, Los Angeles County.—*Edwardsia grandiflora* is a handsome little tree.

CHILIAN SOAP-TREE (Cryptocarya), of Chili, probably *C. miersii*.—This is a rare and beautiful broad-leaved evergreen, belonging to the laurel family. It is an attractive and fast-growing lawn tree, fruiting when 15 feet or so in height, and probably not becoming more than 30 feet high. The fragrance of the leaves, though peculiar, is to most persons very attractive. The large nuts contain starch and saponin in such quantities that if the tree were common it would possibly have a distinct commercial value. The seeds offered are from a tree grown at Niles from Chilean seeds obtained of G. P. Rixford, of San Francisco. The following reports show that under ordinary conditions the seed is slow in starting. Data of later growth will be interesting:

L. L. Guss, Brentwood, Contra Costa County.—One of the nuts of the Chilean Soap-tree germinated five months after planting and is now one inch high with three leaves.

Thomas W. Cowan, Pacific Grove, Monterey County.—The Chilean Soap-tree took five months before it appeared above ground, but is now 6 inches high and appears very vigorous.

TAGASASTE (Cytisus proliferus albus).—This plant, which was introduced by us about twenty years ago for trial as a dry-land forage plant, has been fully discussed in that connection in our earlier reports. More recently we have distributed the seed for trial as a browsing shrub, as a honey plant, and as a small ornamental tree for parks and gardens. In these directions it has proved quite hardy in valleys and lower foothills, and satisfactory. The following notes should be read in connection with the records in previous reports as to the availability of the plant. They also show that it can not endure the frosts of the higher elevations.

W. Croll, Quicksilver, Lake County.—Tagasaste was killed by frost after reaching a height of $7\frac{1}{2}$ feet.

A. C. Boyes, Sonoma, Sonoma County.—Tagasaste trees are very large and sturdy. I find that horses eat it readily when grass is dried up.

J. H. Dobbins, Colfax, Placer County.—Tagasaste would do well and be of great value, but it can not stand the frost here.

Isadore Lecureuil, Santa Cruz, Santa Cruz County.—Tagasaste, planted a year and a half ago, has made a very fine growth and is now beginning to bloom. Without irrigation, but planted in good soil, not too dry, the plants are 3 inches in diameter near the ground and 10 feet high. They are the only evergreen of this kind not hurt by frost in this locality, and are excellent for decorative purposes.

F. Ferguson, Santa Ana, Orange County.—Tagasaste has grown about 6 feet high, but has no blossoms yet.

NEW ZEALAND OIL-TREE (*Alectryon excelsum*).—The only species of the genus; habitat confined to New Zealand. A lofty and handsome evergreen tree with glossy compound leaves and abundant, showy seeds in large scarlet arils. The oil of the seeds was used by the Maories of New Zealand.

F. Ferguson, Santa Ana, Orange County.—I had very good luck with the seed of the New Zealand Oil-tree.

Mrs. C. E. Foss, Alpine, San Diego County.—The New Zealand Oil-tree, now three years old, has attained a height of 4 feet. It has three branches and is full of buds.

ARIZONA ASH (*Fraxinus pistaciæfolia*).—It is found in parts of Texas, Arizona, Nevada, and northern Mexico, varying considerably in size and appearance; but it is everywhere a drought-resisting ash of great value and worthy of extensive planting. The seed distributed was grown at the Santa Monica Forestry Station.

George B. Pearce, Paradise, Butte County.—The Arizona Ash sprouted well and I have several seedlings.

J. H. Dobbins, Colfax, Placer County.—Arizona Ash seed produced two plants; one on dry ground; and the other in a place not quite so dry, and still not moist, is now in its second year and is about 10 feet high.

C. D. Guilford, Creston, San Luis Obispo County.—An Arizona Ash is doing nicely without irrigation. The tree will endure sun, drought, or frost.

ISLAY (*Prunus ilicifolius integrifolius*).—An exceedingly handsome evergreen tree, from Santa Catalina Island, Los Angeles County.

L. L. Guss, Oakley, Contra Costa County.—Islay made a growth of 8 inches during its first summer, from seed planted in February.

Mrs. C. E. Foss, Alpine, San Diego County.—Islay seed germinated slowly, and at the end of six months is only 3 or 4 inches high. The upper leaves were hurt by cold. Our altitude is about 2,000 feet, and it has been uncommonly cold this winter, and dry.

H. H. Gird, Bonsall, San Diego County.—The Sea Island Cherry is to be highly commended. A tree loaded with its somewhat relished, black, shining fruit peering out from its glossy leaves, is a thing of beauty. I sent a tree to Mr. T. V. Munson, of Denison, Texas, some years ago, and it elicited some praise. In fifty years this cherry may be bred up to be a fine fruit and in general cultivation.

JAJOBA (*Sommondsia californica*).—A native shrub from the mountains of the southern portion of San Diego County and adjacent Lower California. It is described by H. H. Gird, of Bonsall, who courteously obtained the seed for us, as a hardy, handsome shrub, which makes almost no litter. In Lower California the fresh seeds are eaten like almonds, and when dried by fire and ground or beaten up, are used as a beverage, either in the form of tablets made up with sugar, or as a simple infusion, of which the inhabitants are very fond. An analysis

of the fire-dried seeds, made by the French Government a few years ago, shows them to contain 48.3 per cent of fatty matter. The oil solidifies at 5° , is suitable for food, and is of good quality, being said to possess the immense advantage of not turning rancid. In Lower California it is prepared by ebullition with water. The French Government has recommended this shrub for experimental culture in the desert regions of the French colonies of North Africa. As the shrub is dioecious, it is necessary to grow both staminate and pistillate specimens in order to produce fruit. The following reports show that in interior places the starting of the plants needs care and shelter from heat:

H. Overacker, Jr., St. Helena, Napa County.—Jajoba seed germinated readily, but died when the second leaf appeared. When this was discovered the bed was shaded, and I have now two good plants.

Louis Schiemann, Sacramento.—I have two dozen plants of Jajoba which are only 6 inches high, but were not touched by frost.

L. L. Guss, Oakley, Contra Costa County.—Jajoba attained a growth of 6 inches in nine months; planted in February.

S. H. Haskell, Porterville, Tulare County.—Jajoba has not done well. I have but one plant alive.

Minnie Neligan, Nipomo, San Luis Obispo County.—Jajoba seed came up well, but the plants are making very slow growth.

Mrs. C. E. Foss, Alpine, San Diego County.—Jajoba seed came up, but the plants only grew to be $1\frac{1}{2}$ inches high and all perished.

ARAUCARIAS.—Two species of *Araucaria* which reach splendid development in some parts of California are the Brazilian *Araucaria* (*A. brasiliensis*) and the Monkey-Puzzle *Araucaria* (*A. imbricata*). Seed was distributed to determine their hardiness and growth under less attention than is usually given in parks and gardens. Reports thus far are not very encouraging.

Albert F. Etter, Etlersberg, Humboldt County.—The *Araucarias* stood the frost all right, but the sun burned them up last July.

I. C. Hill, Dos Palos, Merced County.—Out of twenty seeds of Brazilian *Araucaria* I raised eighteen plants and set them out along the avenue. Gophers ate several and some died for lack of moisture; five or six are now living. They seem to grow very slowly, being only about one foot high now, the third year from seed. They are on heavy soil; no sand nearer than 6 or 7 feet of the surface. One plant near an irrigating ditch is not much larger than the others.

MISCELLANEOUS TREES AND SHRUBS.—The following notes on the species mentioned in each case are suggestive:

A. C. Boyes, Sonoma.—*Bellota* (*Cryptocarpa miersii*) seed all grew up, but the plants are only from 6 to 8 inches high. It grows very slowly; probably the winter here is too cold for it.

H. Overacker, Jr., St. Helena, Napa County.—Brazilian Pepper-tree (*Schinus terebinthus*) seed germinated poorly; but one seed has produced a very fine tree 2 feet high.

Horace Davis, San Francisco.—I obtained two plants of the *Cryptomeria japonica* and one of the *elegans* for planting in the Santa Cruz Mountains; the latter has done very well, but the *japonica* seems to be much more delicate and susceptible both to cold and drought.

Frederic Albrect, Estrella, San Luis Obispo County.—About thirteen years ago I received from the Experiment Station at Berkeley, some Mulberry seedlings. The Chinese Mulberry, Lhoo, and the Japanese Mulberry, Nagasaki, are both of healthy growth and are valuable for timber, while the berries are good for canning, if seasoned with plenty of fresh lemon juice. They are not so fine for table use as Downing's Ever-bearing. The berries are also good for chicken feed. The Nagasaki is a stronger grower than the Lhoo and makes better timber. I got fifty fence posts from two of each kind of the last named.

Miss Helen Dornback, San Leandro, Alameda County.—The Tree-Tomato seed planted two years ago grew and I have now (January, 1903) two excellent trees full of fruit just ripening. The fruit is excellent for preserves.

GREEN-MANURE AND FORAGE PLANTS.

FENUGREEK (*Trigonella fœnum græcum*).—This plant has been quite fully discussed in our last two reports. Later experience seems to disclose greater usefulness than was at first indicated.

H. Overacker, Jr., St. Helena, Napa County.—Fenugreek grew very well on both poor and good soil, and matured a good crop of seed.

T. E. Rice, Livermore, Alameda County.—Fenugreek grew well and produced quite a lot of seed. It only grew a foot high, but that may have been caused by late planting. I have some growing now (December) which was planted the latter part of October, which seems to be growing faster than it did last year.

L. L. Guss, Oakley, Contra Costa County.—Fenugreek sown January 16th germinated in ten days. It will stand low temperature with little injury. It will grow among trees, but does not make a rank growth—about 7 inches; produces a quantity of seed—no tubercles. Soil on which it was planted is a light sand.

Clarence Hildebrand, Guernsey, Kings County.—Fenugreek did not make much of a success as a winter grower.

Wm. Pfeffer, Cupertino, Santa Clara County.—Fenugreek is promising to be a much more satisfactory plant than all the others named (the lupins). The seed was sown the first of February and made quick growth, so it could be plowed-under with benefit. How it will behave when sown earlier and has to stand hard freezing weather I do not know, but then all the other plants are in the same fix. I therefore venture to say that Fenugreek is a more suitable green-manuring plant, owing partly to the rather fine stems, to the smallness of the seed, to the even ripening (no shelling out), and to the great quantity of seeds produced. A green-manuring plant can never become popular with farmers when they can not easily grow the seed for their own sowing: Fenugreek will do it.

Jacob Maehtlen, Covina, Los Angeles County.—Fenugreek during two seasons, with and without irrigation, did not grow larger than 6 inches in sandy loam in which other plants did well. It produced, however, many seeds.

Erwin Hirschfeldt, San Jacinto, Riverside County.—Fenugreek seed planted in rows on January 13th, came up on January 23d, and made good growth. Two days' rain followed by morning frost did not check its growth, but rain and snow followed by cold weather gave it a setback; but it made good headway again when warm weather returned, and by the first of April it was 18 inches high. Seed buds ripened about June 20th and produced a little over four pounds of seed from a small package.

H. H. Gird, Bonsall, San Diego County.—Fenugreek grows well in cold weather and seeds heavily.

HAIRY VETCH (*Vicia villosa*).—Recent reports are on the whole very favorable to this plant, although in some parts of the State it is not highly approved. Our previously published comments upon the plant are supplemented by the following:

W. J. B. Martin, Redding, Shasta County.—Hairy Vetch has proven a great success. I got thirty pounds from Portland and sowed them last autumn, and they made a good, thick growth. I let my milch cow feed it down; the roots were well covered with nodules, and altogether it is the most successful green-manuring plant I have come across. I find that all these plants are better sown in autumn than in spring—clovers and vetches particularly.

J. H. Dobbins, Colfax, Placer County.—Blue Vetch, planted in white-oak land, did not amount to anything—only a few scattering plants appeared and they died before the peas matured. Hairy Vetch, as far as I have tested it, promises to make as great an accession to our forage plants as has Alfalfa. I first sowed in a rocky piece sloping to the north. I sowed very thin a four-ounce packet mixed with rye to about the fourth of an acre; let it drop its seeds the first year; the second year I cut it for seeds and sowed the seeds in all sorts of places and all sorts of ways. Some I sowed with wheat worked in with the cultivator; some on plowed land with oats; some in brushy ground with no preparation, and some on rocky ground around pines, oaks, and in thick brush—all unprepared land. I also scattered the chaff and straw around a great many plants on uncultivated land, but it is too soon to tell what it will do, although I am putting it to the severest tests. My patch made a growth of about 40 inches this year, and as far as I have tried horses and cattle eat it with avidity.

C. C. Wulff, Watsonville, Santa Cruz County.—Although it does not make sufficient winter growth for green-manuring the orchard, the Hairy Vetch is a success when sown with grain. I have this year put 20 acres in oats mixed with Hairy Vetch.

G. R. Coupes, Lodi, San Joaquin County.—The Hairy Vetch made a good growth and seeded very well. The ground where it was grown is a mat of green now (February 26th). The Bitter Vetch also made a good growth and a good amount of seed, but what was scattered on the ground did not grow when the rains came. The horse and cow appeared to like both kinds. I had no way to tell the value as a feed, for I did not have enough, but think the Hairy Vetch will be good to sow in the fall to plow under in the spring, as it makes a good winter growth here even when planted the first of February.

Wm. Pfeffer, Cupertino, Santa Clara County.—Hairy Vetch does not make any growth worth speaking of during December, January, and February, and consequently is valueless for this district.

OTHER VETCHES.—We have distributed quite a large collection of Vetch species recently, and it is too soon to receive comprehensive reports. The following notes are, however, of interest:

T. T. Gross, Janeville, Lassen County.—Narbonne Vetch and Jarosse Vetch bloomed and were bearing seed when they were destroyed by a frost which came between June 1st and June 10th. It is difficult here to grow plants susceptible to frost, because the springs are nearly always backward, and after each rain there is a frost and sometimes hard freezing followed by dry weather. Early fall frosts are always a severe trial here. They reduced my potatoes to half a crop, and tomatoes to quarter of a crop.

H. Overacker, Jr., St. Helena, Napa County.—Chickling Vetch failed in all conditions.

George B. Pearce, Jr., Paradise, Butte County.—Chickling Vetch gave a good yield of forage, planted in rows about 3 feet apart. Jarosse (*Lathyrus* sp.), No. 7521, is a good winter crop, but yields a crop inferior to the Vetches.

T. E. Rice, Livermore, Alameda County.—Chickling Vetch made a heavy growth and bore considerable seed. Some of the plants now growing (December 19th) are 4 inches high. I think this plant will succeed better here for green-manuring and forage than anything I have tried yet. Horses and cattle are very fond of it either green or dry.

H. H. Gird, Bonsall, San Diego County.—Winter Vetch made a fine growth of excellent feed, and the plot is thickly covered with a volunteer growth.

THE LUPINS.—The growth of various species of *Lupinus* has been quite fully characterized in our earlier reports and in a special bulletin. The following are supplementary thereto and present the observations of the several growers, in some cases based upon several years' trial:

L. L. Guss, Oakley, Contra Costa County.—Large White Lupin made a good growth among trees on light sandy soil; the roots showed no tubercles; the seed, being very large, is too expensive for the purpose intended.

G. R. Coupes, Lodi, San Joaquin County.—The European Blue Lupin planted late did nicely until hot weather, when it died.

Wm. Pfeffer, Cupertino, Santa Clara County.—The Lupins made good growth up to the time when they should have been plowed-under, but the seeds are large, ripen unevenly and shell out quickly.

C. C. Wulff, Watsonville, Santa Cruz County.—Large White Lupin made a fine growth. From three packages received from the Station I got 45 pounds of seed. The trouble with the Lupins is that they grow too slow in the winter and make the best growth after April, but we must plow the orchard before that.

W. W. Canfield, San Juan, San Benito County.—Lupin seed sown November 8th; seed ground not manured—rich loam. Plants appeared above surface November 29th; first blossoms appeared March 1st; average height, 12 inches; plowed-under March 10th; plants being crowded with other growth did not spread out nor look healthy as does the native wild Lupin; no tubercles on roots; rooting capacity good. The Lupin seed was planted on clean, well-cultivated ground and drilled in, as directed, some 18 inches apart.

FIELD PEAS FROM RUSSIA.—Two varieties just introduced from Russia by the U. S. Department of Agriculture, have been distributed in California to determine both winter growth for green-manure and summer growth for forage: (1) Bitter Vetch (*Lathyrus sativus*); (2) Russian Field Pea. There seems to be a wide difference between the two in summer growth, the Bitter Vetch being decidedly more hardy, while

both seem to make good winter growth. Later reports will be necessary to determine the availability of the plants.

T. E. Rice, Livermore, Alameda County.—Bitter Vetch made a fine growth of vine and matured a heavy crop of seed. This seems to be the only plant, so far tried, that will make enough winter growth in this locality to be of any use for green-manuring. Cattle and horses are very fond of the vines when cut green and cured as hay. Bitter Vetch and Tangier Pea may not be the same plant, but I am unable to see wherein they differ.

Russian Field Pea made an enormous growth of vine, and was still growing when the warm weather struck it about the middle of May, when it promptly collapsed. I found about a dozen pods, but there were no peas. This plant would probably do well here if planted in October, but it will not stand hot, dry weather.

Albert F. Etter, Ettersberg, Humboldt County.—The Russian Field Pea was a failure at the finish, as it was caught in the scorcher in half-filled pods after attaining a height of $8\frac{1}{2}$ feet. This somewhat unusual growth was secured on our tan-oak land, which was until a short time ago supposed to be too poor to be worth cultivating.

WINTER LENTIL, introduced from France by the United States Department of Agriculture (No. 7523). It has been recommended as more prolific than the Summer Lentil and useful as an annual forage plant. The seeds, well known under the name of Lentils, are a palatable and nutritious food; they are said to form the principal ingredient of the food known as "Revalenta Arabica." The flowers are said to yield considerable nectar, and suitable for bee pastures, but this point is contested.

George B. Pearce, Jr., Paradise, Butte County.—Winter Lentil sown broadcast secured a fine stand and a fine crop of forage, although of no value here as a bee plant, as the bees did not work on it.

H. Overacker, Jr., St. Helena, Napa County.—Winter Lentils grew well under all conditions and matured a good crop of seed.

H. H. Gird, Bonsall, San Diego County.—Winter Lentil makes good growth in cold weather and seeds heavily.

AFRICAN STOCK MELON.

This is the Tsama, or Khama melon, a native of the South African Karoo. Seed was sent out by the Division of Botany, U. S. Department of Agriculture, several years ago, and we have made several distributions from seed grown at our Pomona substation. It promises to be very useful as a field or stock melon, yielding much better per acre than the well-known "Kansas Pie-Melon." As grown at Pomona, on poor, sandy, unirrigated land, it yielded a trifle over nineteen tons to the acre as against ten tons per acre produced by the pie-melon. The results of three years' tests in dry seasons showed the superiority of the Tsama, and have attracted attention in Arizona and New Mexico. The melons are small, round, hairy, and not attractive, but are greedily eaten by stock. In the hands of our correspondents the Tsama does not always surpass the pie-melon. The following are the reports:

C. F. Winter, Tancred, Yolo County.—The African Stock Melon did well on rich ground.

H. Overacker, Jr., St. Helena, Napa County.—The African Stock Melon seed germinated poorly, and under no conditions did they do as well as field pumpkins grown alongside.

T. E. Rice, Livermore, Alameda County.—Khama Melons grew about two inches high and then dried up.

J. W. Green, Soquel, Santa Cruz County.—The African Stock Melon planted in May did not in the start do well, but they made up in the fall and I got a nice lot of melons for my Jersey cow; they seemed to taste good to her.

Clarence Hildebrand, Guernsey, Kings County.—Only one seed of the Stock Melon grew. From this vine I counted 172 melons, ranging from one quarter to two and one half pounds.

Sanberg Bros., Neenach, Los Angeles County.—The African Stock Melon seed was planted alongside the common Kansas Stock Melon, and did not germinate very readily. The plants that came up grew, but did not yield one fourth of the crop that the common Kansas Stock Melon did; besides they are so small that it takes a great amount of labor to gather the crop; their only good point is the large number of seeds which they contain, which makes them more desirable for hog feed than the common Stock Melon. We intend to plant some African Stock Melon next year on that account.

F. W. Collins, Ontario, San Bernardino County.—African Stock Melon produced a great many small melons on the vines, but did not keep so well as the Pie-Melon, nor does it yield so well.

F. A. Blake, Valle Vista, Riverside County.—The Khama or African Stock Melon seed were planted the latter part of May; some in dry ground and the rest in good garden soil. Both grew well and were very prolific, but the melons were disappointingly small. Stock are very fond of them, however, and I think that at a lower altitude (I am nearly 5,000 feet above sea level) they might prove profitable, as they grew in very dry soil without irrigation.

GRASSES.

Several grasses previously reported upon are winning additional favor. The following are suggestive:

C. C. Wulff, Watsonville, Santa Cruz County.—Brome-grass (*Bromus inermis*) planted three years ago on five acres of land was a failure—all killed the first summer. The seed of the Brome-grass has been mixed with a few seed of Orchard-grass, and these have been growing ever since. Last winter I put in more seed of Orchard-grass, which has made a good growth and will, together with Alfalfa and other annuals, make a good stand.

The annual or common Ray-grass has not made as heavy a growth as the Evergreen Perennial, which went through the dry season all right, and now makes a good growth. Pacey's Perennial is the best.

N. C. Gillmore, Sespe, Ventura County.—*Bromus inermis* is very fine for pasture and should be introduced into the mountain pastures, for when it gets a good root it stays; but to get it started stock should not be allowed to run on it for at least one year; after that I believe it would stand like Kentucky Blue-grass does in the East.

T. E. Rice, Livermore, Alameda County.—Tall Fescue-grass (*Festuca elatior*) which I sowed two years ago has kept green ever since it came up. It seeded for the first time this year, grew over 7 feet tall, with seed heads about 18 inches long. I think it will furnish green pasturage the year round when once established.

RAPE.

For winter growth several of the popular Rape varieties are proving satisfactory. The following is a typical instance:

N. C. Gillmore, Sespe, Ventura County.—Dwarf Victoria Rape is a grand fodder plant for hogs, sheep, cows, and poultry, and grows a wonderful amount of rich fodder, which can be cut every four weeks. Frost does not kill it. One plant will grow 3 feet high and will cover a circle 3 feet in diameter. It will stand a large amount of drought when once started so as to get well rooted. The best crop possible for cows and hogs.

CEREALS.

OATS.—The following reports contain important hints of local adaptations:

Albert F. Etter, Etnersberg, Humboldt County.—Virginia Winter Oats is the best I have for grain, being a heavy yielder of very plump, thin-hulled oats. It succeeds as a spring grain, and on hill land seems better adapted than any other of about twenty varieties which I have tested. While better than most white varieties for hay, I think it is slightly inferior to the Australian Red Oats, which with us is regarded as the best hay oat, but not always desirable as a grain for feed.

T. E. Rice, Livermore, Alameda County.—Shatilov Oats were badly affected by rust and smut. Golden Giant Side Oats was not a side oat, and was quite rusty and somewhat smutty. Neither of the above is as good as Black or Red Oats. Danish Island Oats was free from rust and smut, and gave a fine, plump, heavy kernel. They are a side oat.

GIANT WINTER RYE (*Secale cereale*).—Inventory No. 7531. This is a winter-growing Rye, intended to be sown with Vetches and Peas to raise

them above the ground so that they can be mown more easily when grown for forage. The grain seems to have good points.

H. Overacker, Jr., St. Helena, Napa County.—Giant Winter Rye planted March 10th grew 2 feet high and matured seed on poor soil.

George B. Pearce, Jr., Paradise, Butte County.—The Winter Rye was planted in the spring and stood well, although very little of it headed out. It was irrigated a few times in early summer. The heads filled out well. Though not irrigated during most of the hot weather it kept green until fall, and in looking over my experimental plots yesterday (December 23d) some of it was found still alive and growing.

Erwin Hirschfeldt, San Jacinto, Riverside County.—Giant Winter Rye sown on January 13th on sandy land previously irrigated, came up on January 22d, followed by a soaking rain. It stood well, made good growth, and produced abundant fodder.

WHEAT.—The behavior of several new Wheats under trying conditions and in comparison with the varieties commonly grown in the locality is shown in the following:

T. C. Asmus, San Miguel, San Luis Obispo County.—The Wheat samples were sown on new soil on February 24, 1901, by hand, and harrowed twice. I also sowed at the same time an acre of Sonora on one side and an acre of Propo on the other side, two of the leading varieties in this locality. Most of the samples sown did not head. Allosa, however, headed, but did not branch well. Early Baart and Early King did very well; the former gave 39 and the latter 28 pounds from one pound of seed, and both are earlier than the Propo. Early King was a little shrunken.

The winter of 1902 was very dry and I did not sow Early Baart and Early King until March 14th on land that had been plowed in January and again in March. Early Baart gave a very good result, 1,744 pounds from 39 pounds of seed. Sonora sown at the same time and under the same conditions gave about one third less product. Early King, owing to the very large kernel, was very badly shrunken and only gave a crop one half as large as the Early Baart. We had a total of 15 inches of rain in 1901 and 10½ inches in 1902.

MILLETS.—Several varieties of Millet are showing much value, especially for poultry feeding. Five varieties of "Broomcorn Millets" from Russia, introduced by the U. S. Department of Agriculture, have grown well at our substations and promise to supplement the Japanese Millet previously introduced. The following represent the conclusions of many besides the writers:

T. E. Rice, Livermore, Alameda County.—Black Voronezh Millet grew about 3 feet high and produced a heavy crop of seed. This was cut the latter part of June, when another crop came up from the roots and was maturing another crop of seed, but about 200 young chickens found it and stayed with it as long as they could find a seed. The third crop is now (December) about 3 inches high. If this Millet will produce two crops of seed every year, and I think it will, it will be of considerable value to poultry-raisers.

N. C. Gillmore, Sespe, Ventura County.—Japanese Millet planted in December, when very cold, has come up fine. It will grow as easy and under any circumstances where barley will grow, and will produce a crop of seed and a large crop of hay on irrigated ground every five or six weeks during the warm weather, and keep green all winter here; heavy frosts do not even wilt it. If sown thick it is not coarse and is very rich on account of such a large amount of seed. It will stand a great amount of drought when once started well.

FRUITS.

STRAWBERRIES.—Our introduction and distribution of a collection of the best of the newer varieties of European strawberries are described in our last report and the results of trial of them in different parts of the State are given. The following is additional testimony:

T. E. Rice, Livermore, Alameda County.—Royal Sovereign in size, color, and flavor is just as near perfection as it is possible to find. Sensation seems to be a heavy bearer of very large, rather sickly-looking berries, but the flavor is very fine. Scarlet Queen appears to have only one fault, and that is its small size—its flavor is simply delicious.

Alfred F. Etter, Ettersberg, Humboldt County.—Our Rose Ettersberg Strawberry, as I wrote you last spring, was far in the lead and held its place to the end. With me the best yielder of the European varieties is Louise Gauthier, but in flavor and texture it is inferior to the Rose Ettersberg and yielded perhaps two thirds as much. In color it is nearly the same as the Rose Ettersberg, but a less pretty berry, all things considered. Some of the European varieties had well-flavored berries, but none yielded more than about one fourth as much as our own Rose Ettersberg.

CAPE GOOSEBERRY (*Physalis peruviana*).—This fruiting plant seems to be of restricted value in this State where other nobler fruits are so abundant. The following reports have been received:

H. Overacker, Jr., St. Helena, Napa County.—Cape Gooseberry does well, but I think is little used when fruit is as abundant as here.

T. E. Rice, Livermore, Alameda County.—Cape Gooseberries are good when they get ripe, but with us they only ripen a few at a time; the vines are now (December) loaded with green fruit which never will ripen.

Louis Schiemann, Sacramento.—Cape Gooseberry seed sprouted and raised an immense lot of plants; some grew 12 feet, when I cut them back. The berries did not mature. They are growing fast now (December) and stand lots of abuse and transplanting. I shall grow them on trellises for shade.

S. H. Haskell, Porterville, Tulare County.—Cape Gooseberries were not a success, owing to the ravages of a small worm about a quarter of an inch long that eats into the berries when about half grown. The Cape Gooseberries stand more frost than do tomatoes.

Mrs. A. J. Close, Pomona, Los Angeles County.—The Cape Gooseberry, from seed planted a year ago in a sandy loam which was well fertilized the previous winter, has made excellent growth and proved productive. Some were planted in boxes and some sown where the bushes grew. Those transplanted in the cool part of the day did best. The plants required little care, a moderate amount of water, and bore well, a second crop maturing just when the winter frost came. They stood more frost than tomato plants. The fruit is agreeable to taste, and made excellent preserves and jelly of a beautiful amber color.

VEGETABLES.

VEGETABLE MARROW.—This cucurbit is but little known to this country, and seed of a choice variety was distributed to test its availability for wider growing. The variety is known as No. 4366 of the U. S. Department of Agriculture. The reports are very encouraging to the belief that the Marrow may be acceptably added to the squash list by many planters.

H. Overacker, Jr., St. Helena, Napa County.—Vegetable Marrow did well on good soil.

L. J. Harbison, Vacaville, Solano County.—The Vegetable Marrow must be pronounced an acquisition for two reasons: first, the flavor; second, the perfect smoothness, which renders preparation for the table easy.

Leopold Justi, Glen Ellen, Sonoma County.—The Vegetable Marrow proved a very productive and delicious vegetable.

T. E. Rice, Livermore, Alameda County.—Vegetable Marrow grew well and produced an abundance of squashes until the vines were killed by frost in November. The quality was better than that of any other squash we have ever grown.

Robert G. Paget, Felton, Santa Cruz County.—Vegetable Marrow seed was sown about May 1st on steep hillside, well out of the valley, sloping to the southeast, light soil, principally leaf-mold and sand, with plenty of natural seepage water, no artificial irrigation or manuring; previous crop, corn for several years. The vines grew well and yielded a very large crop; more than I have seen in England, the fruit weighing up to 12 pounds each. I cut and used a number green, and harvested the ripe ones after the frost had cut down the vines in November. I am now (January 24th) using these, which are as sound and good as when first harvested and look as if they will keep for months yet. I found the largest fruit grew after the first fall rains on October 13th, which makes me think I should have done better if I had used irrigation. These late fruits did not have time to ripen before the frost. I am using the surplus Marrows for pig feed.

POTATOES.—The Early Dana Potato was distributed three years ago, and though not proving a great acquisition, has disclosed some points of value, as mentioned by the following reports:

J. O. Titlow, Alameda, Alameda County.—Early Dana Potatoes made very good growth in very dry soil and ripened earlier than near-by Burbanks.

H. Hundertmark, Sacramento, Sacramento County.—Early Dana Potatoes were excellent. They ripened at least ten days sooner than the Early Rose.

J. E. Richard, Ceres, Stanislaus County.—Early Dana Potatoes grew fairly well, and bore a small crop.

Albert F. Etter, Ettersberg, Humboldt County.—The Burbank is the best all-around Potato we have so far found for this section. We have tried a score of kinds, but have yet to find an equal to the old Burbank. The Vicks Perfection is a good yielder, but is in the habit of taking a second growth, and consequently there are rotten stem ends, etc.; then, again, it is an early sprouter. Our method of culture is as follows: Early planting in March; then open the furrows deep, drop the potatoes and put the manure in on top of them, and then level with a rubber. This method would not do well, I think, on any but land that absolutely will not bake and where spring rainfall is ample.

SWEET FENNEL.—Last year we distributed seed of six varieties of Sweet Fennel (*Fœniculum dulce*) secured from abroad by the U. S. Department of Agriculture, believing they should be better known by California gardeners. The plants are low-growing and very striking in appearance. The leaf-stalks are very broad, overlapping each other at the base and forming a kind of head or enlargement, which is firm, white, and sweet inside. When this head has reached about the size of a hen's egg it may be slightly earthed-up and blanched. In about ten days it is ready for use and may be as large as one's fist; it is boiled, and has a delicate flavor resembling celery, but sweeter and more delicate. It is too soon to expect reports, but the earnest testimony of the following trial may, we hope, be indicative of the experience of others with the plant:

L. J. Harbison, Vacaville, Solano County.—Sweet Fennel, No. 4370, was planted February 22d and was ready for the table June 1st. Eaten as a salad with mayonnaise we prefer it to the Artichoke. To my surprise it proved most delicious. So thoroughly was I convinced of the worthlessness of the plant that I had hoed the most of it up before giving it the trial which demonstrated its desirability.

THE ECONOMIC GARDEN.

By A. V. STUBENRAUCH.

The appended tables show the results of the test-plot cultures made during the season of 1901-2 at the Economic Garden on the University grounds. No discussion of the data therein presented will be attempted. They are given as a matter of permanent record, and in order to show the extent to which the test culture-work was carried on during the year. Many of the seeds and plants under trial in the garden were received from the Division of Seed and Plant Introduction and Distribution, of the U. S. Department of Agriculture, as indicated by the inventory numbers. The numbers fractionally expressed refer to the California Experiment Station inventory. The numerator represents the acquisition number of the seed or plant, while the denominator shows the year in which it was received.

GREEN-MANURE AND FORAGE PLANTS.

Name of Culture.	Number.	Date of Planting.	Date of Germination.	Date of Blooming.	Remarks.
<i>Anthyllis vulneraria</i>	-----	Oct. 21	Nov. 2	-----	Badly injured by a fungous disease.
Broad bean, Sicilian.....	4353, $\frac{38}{38}$	Jan. 30	-----	-----	Made a fine growth and were distributed in 1901-2.
Broad bean, Neapolitan.....	4354, $\frac{38}{38}$	Jan. 30	-----	-----	Made a fine growth and were distributed in 1901-2.
<i>Cicer arietinum</i>	7017, $\frac{140}{140}$	Dec. 30	Jan. 26	May 14	Well adapted to this climate.
<i>Cicer arietinum</i>	7021, $\frac{140}{140}$	Nov. 14	Nov. 26	April 21	Well adapted to this climate.
<i>Ervum lens</i>	7523, $\frac{140}{140}$	Nov. 14	Nov. 23	April 30	Injured by birds, but made a good crop.
<i>Ervum lens minus</i>	-----	Nov. 1	Nov. 11	April 30	A slow grower.
<i>Ervum monanthos</i>	7522, $\frac{140}{140}$	Nov. 14	Nov. 23	April 14	Grew to a height of 15 inches.
<i>Lathyrus annuus</i>	$\frac{89}{89}$	Oct. 25	Nov. 11	May 8	Made a good growth.
<i>Lathyrus articulatus</i>	$\frac{5}{5}$	Mar. 24	April 9	June 12	No growth; a failure.
<i>Lathyrus cicera</i>	$\frac{5}{5}$	Mar. 24	April 9	June 12	A slow growth; not promising.
<i>Lathyrus clymenum</i>	$\frac{1021}{1021}$	Oct. 19	Nov. 4	June 12	Not promising.
<i>Lathyrus clymenum</i>	$\frac{5}{5}$	Mar. 24	April 16	June 12	Made a good growth.
<i>Lathyrus clymenum</i>	$\frac{33}{33}$	Oct. 14	Nov. 4	April 14	Grew well; promising for cattle feed.
<i>Lathyrus clymenum</i>	$\frac{33}{33}$	Oct. 23	Nov. 4	Mar. 28	Received as <i>L. auriculatus</i> . Made a fine growth.
<i>Lathyrus clymenum</i>	$\frac{33}{33}$	Oct. 23	Nov. 4	April 14	Made a fine growth.
<i>Lathyrus ochrus</i>	$\frac{33}{33}$	Oct. 25	Nov. 4	April 8	A fine growth; produced 38 tons of green stuff per acre.
<i>Lathyrus ochrus</i>	$\frac{5}{5}$	Mar. 24	April 15	-----	Failed to mature.
<i>Lathyrus polyanthus</i>	$\frac{5}{5}$	Mar. 24	April 15	-----	Failed to mature.
<i>Lathyrus pseudo-aphaca</i>	$\frac{5}{5}$	Mar. 24	April 15	-----	Failed to mature.
<i>Lathyrus sativus</i>	own seed	Oct. 23	Nov. 4	April 14	Received as <i>L. tingitanus</i> . Very promising.
<i>Lathyrus sativus</i>	7639, $\frac{140}{140}$	Nov. 14	Nov. 26	April 30	First sowing failed to grow. Second sowing, December 30, was very promising.
<i>Lathyrus sativus</i>	$\frac{5}{5}$	Mar. 24	April 4	June 12	Made only a fair growth.
<i>Lathyrus sativus</i>	1175, $\frac{38}{38}$	Oct. 30	-----	May 8	Grew to a height of 33 inches.
<i>Lathyrus sativus</i>	$\frac{133}{133}$	Oct. 26	Nov. 4	April 14	Received as <i>L. cicera</i> . Grew to a height of 21 inches.
<i>Lathyrus tingitanus</i>	5885, $\frac{153}{153}$	Oct. 24	Nov. 4	-----	By April 18th produced 22 tons of green stuff per acre.
<i>Lathyrus tingitanus</i>	7637, $\frac{140}{140}$	Dec. 30	Nov. 28	May 8	Made only a fair growth.
<i>Lathyrus tingitanus</i>	$\frac{5}{5}$	Mar. 24	April 9	June 12	Not promising.
<i>Lathyrus tingitanus</i>	$\frac{89}{89}$	Oct. 18	Nov. 4	May 2	Received as <i>L. japonicus</i> . Grew to a height of 34 inches.

	5 th	Mar. 24	April 4	June 12	
<i>Lathyrus tingitanus uniflora</i>	-----	Mar. 24	April 4	June 12	Not promising.
<i>Lotus americanus</i>	-----	Oct. 18	Nov. 4	June 12	A slow grower.
<i>Lotus corniculatus</i>	-----	Oct. 21	Nov. 2	-----	Poor growth.
<i>Lotus edulis</i>	-----	Nov. 1	Nov. 18	April 4	Very unpromising.
<i>Lotus ornithopodioides</i>	-----	Nov. 1	Nov. 18	April 14	A failure.
<i>Medicago arenaria</i>	-----	Oct. 8	Nov. 21	April 14	Made a very poor growth.
<i>Medicago berteroaana</i>	-----	Oct. 8	Nov. 21	April 14	Very unpromising.
<i>Medicago denticulata apiculata</i>	-----	Oct. 8	Nov. 18	April 14	Received as <i>M. berteroaana</i> . Not promising.
<i>Medicago hystrix</i>	-----	Oct. 8	Nov. 21	April 4	Made only a fair growth.
<i>Medicago hispida hystrix</i>	-----	Oct. 8	Nov. 21	April 4	Not promising.
<i>Medicago lacinata</i>	-----	Oct. 8	Nov. 21	April 14	Very poor.
<i>Medicago lupulina</i>	-----	Oct. 21	Nov. 2	May 8	Only a fair crop produced.
<i>Medicago pulvinata aculeata</i>	-----	Oct. 8	Nov. 21	April 4	A slow growth produced.
<i>Medicago scutellata</i>	-----	Oct. 21	Nov. 18	-----	Destroyed by birds.
<i>Medicago tuberculata</i>	-----	Oct. 8	Nov. 21	April 4	A poor grower; not promising.
<i>Medicago turbinata</i>	-----	Oct. 8	Nov. 21	April 4	A failure.
<i>Pisum arvense hibernicum</i>	-----	Oct. 19	Nov. 4	May 17	Promising for cattle feed.
<i>Pisum arvense punctatum</i>	-----	Oct. 19	Nov. 4	May 22	Promising for cattle feed.
<i>Pisum arvense vernale</i>	-----	Oct. 19	Nov. 4	-----	A poor growth; very unpromising.
<i>Pisum</i> , field pea from Russia.....	1773	Nov. 8	Nov. 18	May 14	Made a poor growth; very unpromising.
<i>Soja hispida</i>	-----	Mar. 24	April 4	-----	A very poor crop; a failure.
<i>Soy bean</i>	-----	April	-----	-----	Not promising.
<i>Soy bean</i>	4914,	April	-----	-----	Not promising.
<i>Trifolium agrarium</i>	-----	Mar. 22	April 6	-----	Destroyed by birds.
<i>Trifolium alexandrinum</i>	-----	Mar. 22	April 6	-----	Destroyed by birds.
<i>Trifolium alexandrinum</i>	-----	Oct. 19	Nov. 2	-----	Seeds very foul with weed seeds, hence a failure.
<i>Trifolium alexandrinum</i>	7031	Mar. 19	Mar. 26	June 8	Much cleaner seed. Promising.
<i>Trifolium arvense</i>	-----	Mar. 22	April 6	-----	Destroyed by birds.
<i>Trifolium incarnatum alba</i>	-----	Mar. 22	April 6	-----	Destroyed by birds.
<i>Trifolium incarnatum</i>	-----	Mar. 22	April 6	-----	Badly injured by birds.
<i>Trifolium incarnatum Molinerii</i>	-----	Mar. 22	April 6	-----	Badly injured by birds.
<i>Trifolium pannonicum</i>	-----	Mar. 22	April 6	-----	Destroyed by birds.
<i>Trifolium procumbens</i>	-----	Mar. 22	April 6	-----	Destroyed by birds.
<i>Trifolium wormskjoldii</i>	-----	Mar. 15	April 9	-----	Destroyed by birds.
<i>Vicia angustifolia</i>	-----	Oct. 24	Nov. 4	April 14	Received as <i>V. peregrina</i> . Grew to a height of 30 inches.

GREEN-MANURE AND FORAGE PLANTS—Continued.

Name of Culture.	Number.	Date of Planting.	Date of Germination.	Date of Blooming.	Remarks.
<i>Vicia atropurpurea</i>	$\frac{5}{2}$	Jan. 29	Feb. 12	June 3	Made only a fair growth.
<i>Vicia atropurpurea</i>	$\frac{12}{1}$	Oct. 19	Nov. 4	May 17	Promising as a cattle feed.
<i>Vicia atropurpurea</i>	5576, $\frac{158}{0}$	Oct. 18	Nov. 4	May 21	Received as <i>V. Bengalensis</i> .
<i>Vicia atropurpurea</i>		Oct. 23	Nov. 2	May 13	Received as <i>V. bithynica</i> . Grew to a height of 40 inches.
<i>Vicia biflora</i>	$\frac{5}{2}$	Jan. 29	Feb. 12	June 8	Promising for the coast climate.
<i>Vicia calcarata</i>	5572, $\frac{158}{0}$	Oct. 30	Nov. 9	April 4	Grew to a height of 46 inches.
<i>Vicia calcarata</i>	$\frac{12}{1}$	Oct. 19	Nov. 4	May 17	Not promising.
<i>Vicia cordata</i>	$\frac{12}{1}$	Oct. 19	Oct. 31	May 17	Made only a fair growth.
<i>Vicia disperma</i>	$\frac{5}{2}$	Jan. 29	Feb. 15	June 3	Made only a fair growth.
<i>Vicia faba dura</i>	$\frac{12}{1}$	Oct. 19	Nov. 11	April 4	Not promising.
<i>Vicia faba equina nigra</i>	$\frac{12}{1}$	Oct. 19	Nov. 11	April 1	Not promising.
<i>Vicia faba</i>	$\frac{12}{1}$	Oct. 19	Oct. 11	April 1	Not promising.
<i>Vicia faba</i>	1455	Nov. 1	Nov. 18	April 4	A failure.
<i>Vicia faba</i>	1454	Nov. 1	Nov. 18	Mar. 24	Made a poor growth; not promising.
<i>Vicia faba</i>	1453	Nov. 1	Nov. 14	Mar. 24	A failure.
<i>Vicia faba, variety</i>	1453	Nov. 2	Nov. 14	Mar. 15	Promising for coast climates.
<i>Vicia fulgens</i>	$\frac{5}{2}$	Jan. 29	Feb. 15	June 3	Very promising.
<i>Vicia fulgens</i>	1514	Nov. 8	Nov. 28	-----	Very promising.
<i>Vicia fulgens</i>	1514	Oct. 12	Nov. 6	May 2	Promising for hay or for green feed.
<i>Vicia fulgens</i>	5574, $\frac{158}{0}$	Oct. 30	Nov. 20	May 5	Grew to a height of 39 inches.
<i>Vicia grandiflora</i>	$\frac{5}{2}$	Jan. 29	Feb. 15	May 17	Promising for coast climates.
<i>Vicia hirsuta</i>	$\frac{5}{2}$	Jan. 29	Feb. 15	May 17	Failed to grow.
<i>Vicia hirta</i>	5573, $\frac{158}{0}$	Oct. 29	-----	-----	Should be labeled <i>Vicia hirta</i> (Davy).
<i>Vicia lutea</i>	$\frac{12}{1}$	Dec. 14	Feb. 17	April 24	Unpromising.
<i>Vicia lutea</i>	$\frac{5}{2}$	Jan. 29	Feb. 17	May 17	Unpromising.
<i>Vicia monantha</i>	1485	Oct. 26	Nov. 4	May 20	Unpromising.
<i>Vicia monanthos</i>	$\frac{5}{2}$	Jan. 29	Feb. 12	May 14	Unpromising.
<i>Vicia narbonensis</i>	7532, $\frac{140}{0}$	Nov. 15	Nov. 26	April 21	Grew very well, but produced little seed.
<i>Vicia narbonensis</i>	$\frac{12}{1}$	Oct. 19	Nov. 6	April 21	Unpromising.

<i>Vicia nissoliana</i>	$\frac{5}{2}$	Jan. 29	Feb. 12	June 3	Promising for coast climates.
<i>Vicia pannonica</i>	$\frac{1}{21}$	Oct. 19	Nov. 6	April 28	Not promising.
<i>Vicia pseudocracca</i>	$\frac{5}{2}$	Jan. 29	Feb. 12	June 3	Promising for coast climates.
<i>Vicia sativa</i>	5573, $\frac{158}{00}$	Oct. 29	Nov. 9	April 4	Received as <i>V. hirta</i> . Grew to a height of 46 inches.
<i>Vicia sativa</i>	$\frac{158}{00}$	Oct. 25	Nov. 2	Mar. 28	Grew to a height of 42 inches.
<i>Vicia sativa</i>	-----	Oct. 23	Nov. 2	April 14	Received as <i>V. azurea</i> . Grew to a height of 33 inches.
<i>Vicia sativa</i>	$\frac{121}{01}$	Oct. 19	Nov. 6	May 22	Not promising.
<i>Vicia sativa angustifolia</i>	$\frac{5}{2}$	Jan. 29	Feb. 12	June 3	Promising for coast situations.
<i>Vicia sativa cordata</i>	-----	Oct. 18	Nov. 2	April 30	Received as <i>V. atropurpurea</i> . Grew to a height of 40 inches.
<i>Vicia sativa hyemalis</i>	1506	Oct. 31	Nov. 12	May 13	Very promising for coast climates.
<i>Vicia sativa leucosperma</i>	$\frac{5}{2}$	Jan. 29	Feb. 12	June 3	Promising for coast climates.
<i>Vicia sativa macrocarpa</i>	1508	Oct. 18	Nov. 6	April 14	Received as <i>V. macrocarpa</i> . Promising as a cattle feed.
<i>Vicia sativa obovata</i>	$\frac{5}{2}$	Jan. 29	Feb. 12	July 23	Only a fair growth produced; not promising.
<i>Vicia sativa segetalis</i>	$\frac{5}{2}$	Jan. 29	Feb. 12	-----	A poor grower; not promising.
<i>Vicia sativa, variety</i>	1507	Oct. 29	Nov. 9	May 13	Grew to a height of 40 inches.
<i>Vicia varia</i>	$\frac{37}{37}$	Oct. 18	Nov. 4	May 8	Received as <i>V. dasycarpa</i> ; very promising.
<i>Vicia varia</i>	1510	Oct. 23	Nov. 2	April 21	Received as <i>V. cracca</i> ; very promising.
<i>Vicia villosa</i>	$\frac{121}{01}$	Oct. 19	Nov. 4	May 22	Promising for coast climates.
<i>Vicia villosa</i>	-----	Oct. 31	Nov. 9	May 13	Received as <i>V. sativa cordata</i> ; promising for coast climates.
<i>Vigna catjang</i> (cow-pea).....	$\frac{121}{01}$	Oct. 19	Nov. 11	-----	Failed to grow.

The following seeds were planted, but failed to germinate:

<i>Medicago terebellum</i> , $\frac{88}{88}$.	<i>Lathyrus annuus</i> , $\frac{5}{2}$.	<i>Vicia narbonensis serratifolia</i> , $\frac{5}{2}$.
Broad Bean, Aquadulce, 4351, $\frac{88}{88}$.	<i>Lathyrus aphaca</i> , $\frac{5}{2}$.	<i>Vicia narbonensis</i> , $\frac{5}{2}$.
Broad Bean, Sevilla, long pod, 4352, $\frac{88}{88}$.	Soy Bean, 4913, $\frac{88}{88}$.	

GREEN-MANURE PLANTS.

Name of Plant.	Number.	Date of Planting.	Date of Germination.	Date of Blooming.	Remarks.
<i>Astragalus cicer</i>	5841, $\frac{29}{10}$	Mar. 26	April 14	.....	Destroyed by birds.
<i>Astragalus cilicica</i>	$\frac{11}{10}$	Dec. 14	.....	.....	Failed to germinate.
<i>Astragalus falcatus</i>	$\frac{39}{10}$	April	.....	.....	Failed to germinate.
<i>Dolichos lablab</i>	$\frac{81}{10}$	Oct. 31	Nov. 18	.....	Killed by frost.
<i>Dolichos biflora</i>	$\frac{14}{10}$	Mar. 24	.....	.....	Failed to germinate.
<i>Dolichos multiflorus</i>	$\frac{12}{10}$	.....	.....	.....	Failed to germinate.
<i>Lathyrus hirsutus</i>	$\frac{5}{10}$	Mar. 24	April 15	.....	Failed to mature.
<i>Lathyrus nissolia</i>	$\frac{5}{10}$	Mar. 24	.....	.....	Failed to germinate.
<i>Lathyrus platyphyllus colossus</i> ..	5826, $\frac{29}{10}$	Mar. 26	April 14	.....	Failed to mature.
<i>Lupinus affinis</i>	$\frac{5}{10}$	Jan. 29	Feb. 15	.....	Received as <i>L. Barkeri</i> ; injured by a fungous disease.
<i>Lupinus affinis</i>	$\frac{81}{10}$	Oct. 31	Nov. 18	April 24	Made a poor growth; not promising.
<i>Lupinus affinis</i>	$\frac{5}{10}$	Jan. 29	Feb. 12	.....	Received as <i>L. hirtus</i> ; injured by a fungous disease.
<i>Lupinus affinis</i>	$\frac{5}{10}$	Jan. 29	Feb. 12	.....	Received as <i>L. hirtus</i> ; injured by a fungous disease.
<i>Lupinus angustifolius</i>	5585, $\frac{15}{10}$	Oct. 4	Nov. 2	Mar. 24	Promising for coast climates.
<i>Lupinus angustifolius caruleus</i> ..	.....	Oct. 5	Nov. 2	.....	Killed by frost.
<i>Lupinus angustifolius diploleuca</i> ..	.....	Oct. 4	Nov. 4	Mar. 24	Made only a fair growth.
<i>Lupinus albus</i>	$\frac{81}{10}$	Oct. 4	Nov. 2	Mar. 26	Very promising and worthy of further trial on a larger scale.
<i>Lupinus albus</i> .....	.....	Oct. 31	Nov. 18	.....	Made a poor growth.
<i>Lupinus cosentini</i>	$\frac{11}{10}$	Oct. 4	Nov. 4	Feb. 26	Had bluish flowers! Not so badly affected by fungus as last year.
<i>Lupinus cosentini</i>	$\frac{81}{10}$	Nov. 14	Nov. 23	Mar. 4	This is the Palermo White Lupin. It is no better than ordinary
<i>Lupinus cosentini</i>	$\frac{39}{10}$	Oct. 4	Nov. 2	Mar. 28	Promising.
<i>Lupinus densiflorus</i>	$\frac{81}{10}$	Oct. 8	Nov. 2	Mar. 24	Badly injured by aphids.
<i>Lupinus digitatus</i>	$\frac{5}{10}$	Oct. 31	April 18	May 30	Grew to a height of 26 inches.
<i>Lupinus elegans</i>	$\frac{5}{10}$	Jan. 29	Feb. 12	.....	Failed to grow.
<i>Lupinus greecus</i>	$\frac{81}{10}$	Jan. 29	Feb. 12	.....	Failed to grow.
<i>Lupinus hirsutus</i>	$\frac{11}{10}$	Dec. 14	Jan. 14	April 14	Killed by a fungous disease.
<i>Lupinus luteus spontanea</i>	$\frac{5}{10}$	Jan. 29	Feb. 12	.....	Failed to mature seed.
<i>Lupinus mutabilis</i>	$\frac{10}{10}$	Oct. 4	Dec. 4	.....	Killed by fungous diseases.
					Badly injured by frost.

[White Lupin in this climate.]

<i>Lupinus nanus</i>	81	Oct. 31	Nov. 4	Feb. 22	Failed to germinate.
<i>Lupinus pilosus ceruleus</i>	5936, 551	Oct. 7	Nov. 4	Feb. 22	Injured by fungus and aphids.
<i>Lupinus pilosus roseus</i>	5937, 551	Oct. 7	Nov. 4	Feb. 22	Injured by fungus and aphids.
<i>Lupinus polyphyllus alba</i>	552	Jan. 29	Feb. 12	-----	Killed by a fungous disease.
<i>Lupinus pubescens</i>	552	Jan. 29	Feb. 12	-----	Injured by a fungous disease.
<i>Lupinus termis</i>	7022, 140	Nov. 14	Nov. 18	April 4	The first sowing of Nov. 9th failed to germinate. The second sowing [made a heavy crop.
<i>Lupinus termis</i>	5583, 153	Oct. 5	-----	Mar. 8	Very promising for coast climates.
<i>Lupinus termis</i>	498	Oct. 4	Nov. 4	Mar. 24	Very promising for coast climates.
<i>Medicago lupulina</i>	35	Nov. 1	Nov. 18	May 8	Very promising for coast climates.
<i>Medicago scutellata</i>	35	Oct. 8	Nov. 21	Mar. 24	Very promising for coast climates.
<i>Melilotus cerulea</i>	121	Oct. 19	Nov. 2	June 8	Not promising.
<i>Melilotus indica</i>	-----	Oct. 12	Nov. 2	May 22	A slow grower.
<i>Melilotus infesta</i>	198	Oct. 8	Nov. 4	April 14	Not promising.
<i>Melilotus macrostachys</i>	5578, 153	Oct. 12	Nov. 2	April 14	The only variety of Melilotus eaten by a cow to which the different [varieties were offered.
<i>Melilotus macrostachys</i>	153	Nov. 1	Nov. 18	June 3	Not promising for coast districts.
<i>Melilotus rotundifolia</i>	35	Oct. 8	Nov. 11	April 14	A poor grower.
<i>Melilotus testa</i>	35	Oct. 8	Nov. 2	May 13	Not promising.
<i>Melilotus tommasinii</i>	35	Oct. 8	Nov. 2	April 30	A poor grower.
<i>Melilotus vegetalis</i>	121	Oct. 19	Nov. 2	April 21	A poor grower.
<i>Melilotus vulgaris</i>	81	Nov. 1	Nov. 18	April 21	Not promising for coast climates.
<i>Melilotus vulgaris</i>	-----	Oct. 8	Nov. 2	April 30	Not promising for coast climates.
<i>Ornithopus sativus</i>	121	Oct. 19	Nov. 14	May 13	Not promising for coast climates.
<i>Scorpiurus verticillata</i>	5581, 153	Oct. 8	Nov. 21	April 14	Not promising for coast climates.
<i>Trigonella corniculata</i>	5879, 153	Oct. 26	Nov. 2	April 14	Grew to a height of 32 inches.
<i>Trigonella suavisima</i>	81	Dec. 14	-----	-----	Failed to germinate.

FORAGE PLANTS.

Name of Plant.	No.	Date of Planting.	Date of Germination.	
<i>Atriplex bracteosa</i>	138 01	Dec. 14	Feb. 17	Failed to grow.
<i>Atriplex nitens</i>	70 01	Dec. 14	Feb. 17	Failed to grow.
<i>Chenopodium quinoa</i>	53 00	Mar. 27	April 9	Destroyed by birds.
<i>Onobrychis sativa</i>	411 02	.....	.....	.....
Parsnip (Sutton's Large Guernsey)	96 99	Mar. 27	April 14	Promising.
Parsnip (cattle)	96 99	Mar. 27	April 14	Promising.
<i>Phaseolus retusa</i> ?	695 02	April	.....	A good growth produced.

The following failed to germinate:

161 01 <i>Atriplex canescens</i>	161 01 <i>Atriplex nuttalli</i>	161 01 <i>Atriplex polycarpa</i>
161 01 <i>Atriplex coronata</i>	161 01 <i>Atriplex species</i>	92 02 <i>Phaseolus mungo</i>

The following species were added to the collection represented in the Economic Garden grass plots:

61 01 <i>Agropyron richardsoni</i> .	80 02 <i>Eragrostis abyssinica</i> .
— <i>Agropyron repens</i> .	80 02 <i>Eragrostis abyssinica</i> .
20 02 <i>Agrostis exarata</i> , Dist. No. 99.	81 02 <i>Eragrostis amabilis</i> .
20 02 <i>Andropogon rufus</i> , Dist. No. 485.	— <i>Eragrostis neo-mexicana</i> .
20 02 <i>Andropogon saccharoides</i> , Dist. No. 99.	20 02 <i>Eragrostis neo-mexicana</i> , Dist. No. 377.
61 01 <i>Bromus brevistaratus</i> .	20 02 <i>Eragrostis purshii</i> .
— <i>Bromus carinatus hookerianus</i> .	20 02 <i>Eriochloa punctata</i> , Dist. No. 424.
20 02 <i>Bromus giganteus</i> , Dist. No. 290.	20 02 <i>Festuca scabrella</i> , Dist. No. 794.
20 02 <i>Bromus marginatus</i> , Dist. No. 155.	20 02 <i>Hordeum murinum</i> .
20 02 <i>Bromus porteri</i> , Dist. No. 20.	20 02 <i>Hordeum murinum chilense</i> .
20 02 <i>Bromus richardsoni</i> , Dist. No. 289.	20 02 <i>Lespedeza sericea</i> , Dist. No. 466.
20 02 <i>Bromus secalinus</i> , Dist. No. 5574.	20 02 <i>Lespedeza striata</i> , Dist. No. 613.
— <i>Chaetochloa composita</i> , Dist. No. 234.	— <i>Panicum colonum</i> .
— <i>Deschampsia cespitosa</i> .	— <i>Panicum crus-galli</i> , var.
— <i>Eleusine coracana</i> .	20 02 <i>Panicum saccharatum</i> , Dist. No. 423.
20 02 <i>Elymus ambiguus</i> , Dist. No. 396.	— <i>Panicum texanum</i> .
20 02 <i>Elymus canadensis</i> , 324 and 189.	20 02 <i>Phalaris caroliniana</i> , Dist. No. 608.
20 02 <i>Elymus condensatus</i> , Dist. No. 360.	— <i>Phalaris caroliniana</i> .
20 02 <i>Elymus glaberrimus</i> , Dist. No. 769.	85 02 <i>Poa lœviculmis</i> .
20 02 <i>Elymus glaucus</i> , Dist. No. 263.	20 02 <i>Puccinellia airoides</i> , Dist. No. 333.
20 02 <i>Elymus hirsutiglumis</i> .	— <i>Sporobolus airoides</i> .
20 02 <i>Epicampes ligulata</i> , Dist. No. 869.	20 02 <i>Triodia mutica</i> , Dist. No. 425.

Grasses which failed to germinate:

— <i>Andropogon affinis</i> .	20 02 <i>Festuca valesiaca</i> .
20 02 <i>Aristida fasciculata</i> , Dist. No. 336.	81 02 <i>Hilaria cenchroides</i> .
20 02 <i>Bouteloua hirsuta</i> , Dist. No. 449.	20 02 <i>Koeleria valesiaca</i> .
20 02 <i>Bouteloua polystachya</i> , Dist. No. 242.	20 02 <i>Lycurus phleoides</i> , Dist. No. 678.
20 02 <i>Calamagrostis canadensis acuminata</i> , Dist. No. 532.	20 02 <i>Melinis minutiflora</i> , Dist. No. 306.
20 02 <i>Calamagrostis hyperborea americanus</i> , Dist. No. 523.	20 02 <i>Mucuna utilis</i> , Dist. No. 741.
20 02 <i>Calamagrostis langsdorfii</i> .	20 02 <i>Panicularia americana</i> , Dist. No. 287.
61 01 <i>Calamagrostis langsdorfii</i> .	20 02 <i>Panicularia nervata</i> .
20 02 <i>Chloris elegans</i> , Dist. No. 243.	20 02 <i>Pencillaria zeaoides</i> .
61 01 <i>Dactyloctenium australiense</i> (Button-grass).	20 02 <i>Pennisetum typhoideum</i> .
20 02 <i>Eatonia obtusata</i> , Dist. No. 187.	20 02 <i>Phleum alpinum</i> , Dist. No. 156.
20 02 <i>Elymus canadensis</i> , Dist. No. 324 and 189.	20 02 <i>Poa lœvigata</i> , Dist. No. 816.
20 02 <i>Elymus sibericus</i> .	20 02 <i>Poa lucida</i> , Dist. No. 415.
20 02 <i>Elymus simplex</i> .	81 02 <i>Poa wheeleri</i> .
20 02 <i>Elymus triticoides</i> , Dist. No. 833.	20 02 <i>Polypogon monspeliensis</i> , Dist. No. 846.
20 02 <i>Eragrostis pilosa</i> .	20 02 <i>Sporobolus depauperatus</i> , Dist. No. 105.
20 02 <i>Eriocoma cuspidata</i> , Dist. No. 103.	20 02 <i>Thermopsis montana</i> , Dist. No. 821.
20 02 <i>Festuca heterophylla</i> , Dist. No. 720.	20 02 <i>Triodia albescens</i> .
61 01 <i>Festuca kingii</i> .	20 02 <i>Trisetum flavescens</i> , Dist. No. 2836.
	20 02 <i>Uniola paniculata</i> , Dist. No. 878.
	20 02 <i>Zizania aquatica</i> , Dist. No. 718.
	81 02 <i>Zoysia pungens</i> .

University of California—Students' Observatory: Associate Professor ARMIN O. LEUSCHNER, in charge.

Compiled by JAMES D. MADRILL.

* *see* *Abstracts*

University of California—Student's Observatory: ARMIN O. LEUSCHNER, Director.

Compiled by ABELAIDE M. HOLT.

		JULY.		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		JANUARY.		FEBRUARY.		MARCH.		APRIL		MAY.		JUNE.		FOR YEAR ENDING JUNE 30, 1903					
BAROMETER.		Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches		
Mean barometer.			29.903		29.912		29.882		29.949		30.010		30.070		30.100		30.086		29.955		29.997		29.929		29.906		29.975		29.975		
Highest daily average.		31st	30.072	14th	30.082	5th	30.082	31st	30.178	24th	30.225	20th	30.209	3d	30.320	9th	30.320	9th	30.185	2d	30.142	20th	30.062	3d	30.092	30th	30.092	Jan. 3d	30.125		
Lowest daily average.		23d	29.737	18th	29.781	19th	29.772	23d	29.687	5th	29.628	9th	29.640	27th	29.664	1st	29.769	24th	29.710	10th	29.745	31st	29.800	20th	29.770	Nov. 5th	29.625	Nov. 5th	29.625		
Highest thermometer.		31st, 8 A. M.	30.088	14th, 8 P. M.	30.104	5th, 8 A. M.	30.104	31st, 8 A. M.	30.206	25th, 8 A. M.	30.246	9th, 8 A. M.	30.229	3d, 8 A. M.	30.355	10th, 8 A. M.	30.344	9th, 8 A. M.	30.188	21st, 8 A. M.	30.103	31st, 8 A. M.	30.103	3d, 8 A. M.	30.194	Nov. 5th	30.355	Nov. 5th	30.355		
Lowest thermometer.		23d, 8 P. M.	29.700	18th, 8 P. M.	29.700	19th, 8 P. M.	29.730	23d, 8 P. M.	29.658	5th, 8 P. M.	29.620	9th, 8 P. M.	29.610	27th, 8 A. M.	29.578	1st, 8 A. M.	29.738	24th, 8 P. M.	29.694	15th, 8 P. M.	29.722	31st, 8 P. M.	29.722	25th, 8 P. M.	29.706	Jan. 27th, 8 A. M.	29.576	Jan. 27th, 8 A. M.	29.576		
Monthly range.			0.385		0.335		0.279		0.648		0.626		0.419		0.778		0.606		0.408		0.471		0.333		0.298		0.739		0.739		
THERMOMETER.		Degrees.		Degrees.		Degrees.		Degrees.		Degrees.		Degrees.		Degrees.		Degrees.		Degrees.		Degrees.		Degrees.		Degrees.		Degrees.		Degrees.		Degrees.	
Mean temperature.		60.4		60.3		60.6		60.7		60.7		60.7		60.7		60.7		60.7		60.7		60.7		60.7		60.7		60.7		60.7	
Highest daily average.		24th	64.5	2d	63.7	29th	63.7	14th	63.7	8th	63.3	8th	63.3	25th	63.7	15th	63.7	15th	63.7	29th	63.7	30th	63.7	30th	63.7	30th	63.7	June 6th	63.7	June 6th	63.7
Lowest daily average.		20th	56.4	4th	58.0	23d	57.7	31st	57.7	25th	57.7	30th	57.7	30th	57.7	1st	57.7	1st	57.7	1st	57.7	1st	57.7	1st	57.7	1st	57.7	Feb. 13th	57.7	Feb. 13th	57.7
Maximum temperature.		11th	81.3	31st	82.2	29th	83.2	1st	83.2	7th	83.2	7th	83.2	23d	83.2	23d	83.2	23d	83.2	23d	83.2	23d	83.2	23d	83.2	23d	83.2	June 6th	83.2	June 6th	83.2
Minimum temperature.		2d	49.0	20th	52.6	28th	49.0	31st	47.1	28th	49.0	30th	49.0	10th	49.0	10th	49.0	10th	49.0	10th	49.0	10th	49.0	10th	49.0	10th	49.0	Feb. 13th	49.0	Feb. 13th	49.0
Monthly range.			32.3		29.6		34.2		36.1		34.2		34.2		34.2		34.2		34.2		34.2		34.2		34.2		34.2		34.2		34.2
Maximum & minimum temperatures.		24th	64.5	2d	49.0	29th	63.7	14th	63.7	8th	63.3	8th	63.3	25th	63.7	15th	63.7	15th	63.7	29th	63.7	30th	63.7	30th	63.7	30th	63.7	June 6th	63.7	June 6th	63.7
Mean daily variation.			15.4		14.4		15.6		13.5		12.0		11.8		11.4		14.5		12.9		17.3		18.9		21.1		21.1		15.1		15.1
Maximum daily variation.		11th	29.3	31st	29.3	29th	29.3	1st	28.8	2d	28.1	17th	17.3	16th	16.5	19th	21.9	21st	20.6	30th	22.5	26th	28.1	5th	26.6	June 5th	26.6	June 5th	26.6		
Lowest daily variation.		20th	9.1	10th	9.5	17th	6.0	24th	6.6	8th	5.6	6th, 8th	6.9	24th	3.2	7th	6.0	16th	6.2	16th	11.0	5th	9.0	14th	11.5	Jan. 24th	8.2	Jan. 24th	8.2		
PRECIPITATION.		Inches		Inches		Inches		Inches		Inches		Inches		Inches		Inches		Inches		Inches		Inches		Inches		Inches		Inches		Inches	
Total for June, 1902.			0.000		0.000		0.000		2.361		3.212		3.693		5.162		2.650		7.795		1.111		0.022		0.000		0.000		0.000		0.000
Total for June, 1901.			0.000		0.000		0.000		2.991		5.573		9.296		14.428		16.478		24.273		25.284		25.496		25.496		25.496		25.496		25.496
Total for June, 1900.			0.000		0.000		1.302		1.982		5.133		6.610		7.972		18.440		22.616		24.183		25.808		25.808		25.808		25.808		25.808
Total for June, 1903.			0.022		0.007		0.000		0.148		0.195		0.690		0.148		0.062		0.072		0.030		0.035		0.035		0.035		0.035		0.035
Total for June, 1902.			0.022		0.029		0.029		0.172		0.397		0.545		0.397		0.607		0.607		0.769		0.744		0.744		0.744		0.744		0.744
Total for June, 1901.			0.035		0.084		0.151		0.211		0.352		0.436		0.595		0.729		0.810		0.835		0.809		0.809		0.809		0.809		0.809
RELATIVE HUMIDITY.		Per Cent.		Per Cent.		Per Cent.		Per Cent.		Per Cent.		Per Cent.		Per Cent.		Per Cent.		Per Cent.		Per Cent.		Per Cent.		Per Cent.		Per Cent.		Per Cent.		Per Cent.	
Mean relative humidity.		88.7		90.0		88.0		91.7		89.9		90.5		82.4		85.2		89.7		88.5		87.1		88.8		88.8		88.8		88.8	
Highest daily average.		12th, 8 A. M.	95.0	4th, 5th, 8 A. M.	97.0	8th, 8 A. M.	97.0	28th, 8 A. M.	100.0	10, 12, 14, 15, 8 A. M.	97.0	10, 26, 8 A. M.; 9, 1, 25, 31, 8 P. M.	97.0	Frequently.	97.0	11, 8, 9, 23, 8 A. M.; 27, 8 P. M.	96.0	28, 8 A. M., 13, 29, 13, 8 P. M.	97.0	23, 8 A. M.; 15, 8 P. M.	94.0	Frequently.	94.0	5th, 8 A. M.	92.0	Oct. 20th, 8 A. M.	100.0	100.0	100.0	100.0	
Lowest daily average.		8th, 8 A. M.	77.0	13th, 8 A. M.	84.0	20th, 8 A. M.	68.0	6th, 8 P. M.	81.0	20th, 8 P. M.	77.0	17th, 8 A. M.	80.0	12th, 8 A. M.	85.0	12th, 8 A. M.	72.0	19th, 8 P. M.	78.0	5th, 8 A. M.	73.0	16th, 8 A. M.	73.0	5th, 8 P. M.	75.0	Sept. 29th, 8 A. M.	68.0	68.0	68.0	68.0	
Monthly range.			18.0		13.0		29.0		19.0		20.0		17.0		12.0		24.0		17.0		16.0		21.0		19.0		21.0		22.0		22.0
Maximum & minimum.		8th	95.0	3d, 31st	7.0	37th	11.0	17th	13.0	9th	11.0	26th, 30th	11.0	11th	15.0	23d, 28th	9.0	15th	13.0	10th	13.0	10th	13.0	10th	13.0	10th	13.0	10th	13.0	10th	13.0
Lowest daily variation.		13th, 19th, 20th, 21st	0.0	7th, 12th, 16th, 21st.	0.0	3d, 7th, 12th, 15th.	0.0	2, 6, 9, 10, 12, 15, 24, 25	0.0	19th	0.0	7th, 8th	0.0	11th	0.0	13th	0.0	23d, 16th, 25th.	0.0	4th, 31st, 30th	0.0	6, 12, 18, 20, 21, 22, 29.	0.0	Frequently.	0.0	Frequently.	0.0	Frequently.	0.0	Frequently.	0.0
WEATHER.																															
Number of clear days.		18		5		9		9		14		13		13		14		4		17		15		15		140		140		140	
Number of fair days.		5		8		4		12		13		4		7		10		4		8		10		8		101		101		101	
Number of cloudy days.		8		18		17		10		13		8		11		8		15		7		15		7		124		124		124	
Total days.		31		31		31		31		31		31		31		31		31		31		31		31		31		31		31	
Days when rain fell.		6		10		17		8		3		6		6		5		6		1		11		9		68		68		68	
Days when rain fell.		0		0		0		0		7		11		11		5		17		5		1		1		64		64		64	
WIND OBSERVATIONS.																															
Prevailing direction of wind.		W. S. W.		W. S. W.		W. S. W.		S.		S. and N. N. W.		E. S. E.		E.		N. E.		E. S. E.		W. N. W.		S. S. E.		S. S. W.		S. S. W.		S. S. W.		S. S. W.	

THE CULTURE SUBSTATIONS.

By A. V. STUBENRAUCH, Superintendent.

The work of the culture substations was fully reported upon by Inspector Charles H. Shinn, and the data presented by him have been published in the form of a bulletin (Bulletin No. 147, June, 1902). The work carried on under Mr. Shinn's supervision has thus been brought to a close, so far as could be done before his resignation as Inspector of Stations took effect. The plan of publishing the results of the work of the substations in the form of a bulletin or bulletins is an excellent one, and as it is to be continued in the future, the following report of the work of the substations for the past season should not be considered more than a report of progress. The custom of presenting the work of the culture substations for each fiscal year is unfortunate, in that it makes the report begin and end in mid-seasons, when the complete data of the previous season are already six months old, and those of the prevailing one are only half-way complete. For that reason, this report will include only a record of the work in hand, with some remarks regarding conditions and plans for the work of the several substations for the future. The interpretation and discussion of the specific data will be reserved for separate bulletins.

In presenting this report, the writer feels it incumbent upon himself to offer some apology for its evident lack of definiteness. The lack of a definite plan of work outlined for each substation is what is especially referred to. While this lack has been realized from the first, it has so far been impossible to correct the deficiency. It is hoped, however, that in the course of a reasonable period of time some definite problems pertaining to the agriculture or horticulture of the districts represented by the substations will form the major part of their work. It is impossible to cover the whole gamut of agricultural and horticultural experimentation at each substation without the expenditure of more funds than are at command. By attempting it, the work is liable to be spread to such an extent that its effectiveness in any one direction will be destroyed. A few well-defined problems of prime local importance should be taken up at each substation—such problems as are impossible to solve upon grounds not under the absolute control of the station authorities. Until these problems are fully solved, all other work of the substations should be considered secondary in importance. If the criticisms which are now being made by some against the maintenance of the substations on a permanent basis (requiring thereby a fixed expenditure) are to be overcome at all, it seems to the writer that the plan of work above alluded to offers the best, if not the only, method of meeting the objections cited.

Another phase of substation work which deserves special attention in the future is the so-called demonstration experiment. This can be made of inestimable value to the regions in which the substations are located.

In many instances the solving of some problem involves a radical change in the prevailing practices. Unless the success of a new method or a new crop can be actually demonstrated, the farmers of the district will be slow to adopt it. Indeed, it often happens that a valuable method of work is given "a black eye" in the community by its failure in the hands of some man who may not have fully followed its provisions. By demonstrating the working of the method on a sufficiently large scale to be of practical importance, it will be possible to offset the charge of "mere theory" which is so often advanced by some of the ultra-practical farmers.

FOOTHILL SUBSTATION.

East of Jackson, Amador County.

The officers of this substation remain the same as they have been for the past two years. Mr. John H. Barber continues to act as foreman, and to his untiring energy and zeal is due the credit for the excellent condition of the work of this station. Judge R. C. Rust continues to act as patron.

The remoteness of this station from railroad facilities still remains as a serious handicap to its development upon broader lines. While situated in a region in some respects comparable to the Placer County foothill fruit district, it is next to impossible to induce the fruit-growers of the latter district to consider the results obtained at this station as of any direct value to them. It is unfortunate that the prospects of securing a railroad into Jackson, which were so promising when the station was established, have not been fulfilled. There is still talk of a railroad into the district, but its coming seems as uncertain as ever. The region surrounding the station is primarily a mining center. Agriculture and horticulture, therefore, are of secondary importance, and are destined to remain so until the railroad actually reaches Jackson. As it is now, it is impossible to ship fresh fruit or other perishable products in good condition. Under these circumstances, the influence of the station must be considered local. Its results can not be looked upon as of general interest. Its existence can hardly claim to be of prime importance to the welfare of the agricultural and horticultural interests of the Jackson district.

CLIMATE.

The appended table gives the summary of the meteorological records taken at this station during eighteen months ending with June, 1903. The seasons represented in the table were not unusual. The rainfall was just the average for the past five years. It was exceptional in that the late rains of April and May were deficient. This deficiency was detrimental to crops; owing to the shallow soils and steep slopes, there is not sufficient storage capacity within the soil to tide over a prolonged season of drought.

METEOROLOGICAL RECORD AT THE FOOTHILL SUBSTATION—JANUARY 1, 1902, TO JUNE 30, 1903.

Month.	Mean Monthly Maximum.....	Mean Monthly Minimum.....	Mean Monthly Range.....	Extreme Maximum with Dates.....	Extreme Minimum with Dates.....	Number of Days 90° or Over.....	Number of Days 32° or Below.....	Rainfall During Month.....	Number of Days when Rain Fell.....	Number of Cloudy Days.....	Number of Partly Cloudy Days.....	Number of Clear Days.....
1902—January.....	50.0°	32.0°	18.0°	62°—1st	23°—26th	0	19	1.23	6	15	3	13
February.....	54.0	37.5	16.5	67—16th	26—1st	0	7	9.36	20	19	3	6
March.....	55.0	34.0	21.0	72—31st	24—24th	0	14	4.37	7	10	3	18
April.....	63.0	39.0	24.0	75—15th	30—2d	0	2	2.71	10	10	6	14
May.....	67.0	46.0	21.0	84—25th	39—18th	0	0	1.99	4	3	4	24
June.....	82.0	59.0	23.0	91—9th, 19th	43—2d	3	0	0.15	1	0	0	30
July.....	85.0	62.0	23.0	101—24th	50—2d	10	0	0.00	0	1	2	28
August.....	83.0	61.0	22.0	95—3d	51—15th	7	0	0.00	0	2	1	28
September.....	82.0	62.0	20.0	94—7th	49—18th	8	0	0.00	0	3	4	23
October.....	69.0	52.0	17.0	78—1st	45—31st	0	0	2.46	4	7	0	24
November.....	56.0	42.0	14.0	67—7th	34—28th	0	0	4.51	8	10	1	19
December.....	53.0	39.0	14.0	65—8th	31—28th	0	1	3.73	6	10	6	15
1903—January.....	54.0	37.0	17.0	72—6th	29—29th	0	5	9.12	10	13	2	16
February.....	54.0	34.0	20.0	65—19th	21—14th	0	12	1.62	6	6	1	21
March.....	55.5	40.5	15.0	68—21st	31—6th	0	2	11.81	16	18	4	9
April.....	62.0	42.0	20.0	75—8th	32—11th	0	1	1.31	4	5	0	25
May.....	75.0	40.0	35.0	94—30th	37—20th	1	0	0.04	1	2	1	28
June.....	84.0	56.0	28.0	100—6th, 7th	41—2d	10	0	0.00	0	4	3	23

TESTS OF GREEN-MANURE, GRAIN, AND MISCELLANEOUS PLANTS.

For the sake of convenience, and as a matter of record and ready reference, the results of the test-plot trials for the season of 1901-2 have been tabulated and are presented in the table following. Many of the tests were vitiated by the depredations of rabbits, which visited the plots in great numbers. During the fall of 1902 a rabbit-proof wire-netting fence was run around the station grounds, and no further trouble from this source is anticipated.

RESULTS OF TEST-PLOT CULTURES AT THE FOOTHILL SUBSTATION—1901-1902.

Name of Plant.	Number.	Source.	Date of Sowing.	Date of Germination.	Date of Blooming.	Height at Time of Blooming.	Remarks.
FORAGE CROPS.							
<i>Atriplex semibaccata</i>	Tulare	Nov. 14	.....	.....	.....	Came up well, but grew poorly, and died during the winter.
<i>Atriplex halimus</i>	Tulare	Nov. 15	.....	.....	.....	Failed to germinate.
<i>Atriplex halimoides</i>	Tulare	Nov. 15	.....	.....	.....	Failed to germinate.
<i>Atriplex vesicaria</i>	Tulare	Nov. 15	.....	.....	.....	Failed to germinate.
<i>Atriplex leptocarpa</i>	Tulare	Nov. 15	.....	.....	.....	Failed to germinate.
Dwarf Essex rape.....	Trumbull & Beebe	Dec. 30	Jan. 13	May 5	4 ft.	Good leafy growth, but not heavy.
March rape.....	Home-grown seed	Dec. 24	Jan. 6	Apr. 15	2 ft.	Not as good as Dwarf Essex rape under similar conditions.
<i>Rhagodia nutans</i>	Tulare	Nov. 15	.....	.....	.....	Failed to germinate.
<i>Rhagodia spinescens inermis</i>	Home-grown seed	Nov. 15	.....	.....	.....	Failed to germinate.
GREEN-MANURE CROPS.							
<i>Cicer arietinum</i>	7017	U. S. D. A.	Dec. 24	Jan. 31	May 15	15 in.	Planted on red soil; of no value.
<i>Cicer arietinum</i>	7017	U. S. D. A.	Dec. 11	.....	.....	.....	Failed to germinate; planted on granite soil.

Cicer arietinum	7021	U. S. D. A.	Dec. 24	Jan. 24	May 7	14 in.	Too poor to cut; on red soil.
Cicer arietinum	7021	U. S. D. A.	Dec. 11	Jan. 20	May 7	18 in.	Mostly killed by birds and rabbits or washed out by rain.
Ervum monanthos	7522	U. S. D. A.	Dec. 24	Jan. 15	June 1		Good growth on red soil; matted on ground. Yielded 29,040 pounds of green stuff per acre for plowing-under.
Ervum monanthos	7522	U. S. D. A.	Nov. 28	Dec. 9			Of no value on granite soil; made little growth.
Ervum lens	7523	U. S. D. A.	Nov. 28	Dec. 9	May 22	8 in.	Of little value on granite soil; partly washed out by rain.
Big Hiller lentil			Dec. 12	Jan. 5	May 5	8 in.	Best of the lentils tested, but of little value on granite soil.
Lathyrus ochrus	7534	U. S. D. A.	Dec. 24	Jan. 22	May 7	15 in	Planted on red soil. Yielded 30,855 pounds of green stuff per acre for plowing-under.
Lathyrus ochrus	7534	U. S. D. A.	Nov. 28	Dec. 28	May 3	6 in.	No value on granite soil; also sown with rye, No. 7531. (See below.)
Lathyrus sativus	7639	U. S. D. A.	Dec. 24	Jan. 24	May 1	15 in.	Planted on red soil. Yielded 25,410 pounds of green stuff per acre for plowing-under.
Lathyrus sativus	7639	U. S. D. A.	Nov. 28	Dec. 24	May 1	8 in.	No value on granite soil.
Lathyrus tingitanus	7637	U. S. D. A.	Nov. 28				Failed to germinate in granite soil.
Lupinus albus	5434	U. S. D. A.	Oct. 3	Oct. 12	Jan. 5	22 in.	Frost killed plants down to 6 inches in January. Second growth bloomed March 31st, when plants were 24 inches high. Promising green-manure plant on red soil.
Lupinus albus	5434	U. S. D. A.	Oct. 9	Nov. 5			Home-grown seed planted on granite soil; abundant tubercles in January; plowed-under April 9th.
Lupinus albus	5434	U. S. D. A.	Sept. 28	Oct. 9	Jan. 5	12 in.	Home-grown seed planted on granite soil with northern exposure, which is evidently too cold for good results with this plant. Plowed-under April 9th.
Lupinus albus	5434	U. S. D. A.	Sept. 27	Oct. 9	Jan. 5	1 ft.	Home-grown seed planted on red soil. Almost wholly destroyed by rabbits; otherwise a promising green-manure plant on this soil. Plowed-under March 30th.
Lupinus albus	7524	U. S. D. A.	Nov. 24				Destroyed by rabbits.
Lupinus albus		Palermo	Nov. 22	Dec. 5			Destroyed by rabbits.
Lupinus termsis	7022	U. S. D. A.	Nov. 21	Dec. 4			Destroyed by rabbits.
Lupinus termsis	7022	U. S. D. A.	Nov. 22	Dec. 4	Mar. 31	8 in.	Of no value.

RESULTS OF TEST-PLOT CULTURES AT THE FOOTHILL SUBSTATION—1901-1902—Continued.

Name of Plant.	Number.	Source.	Date of Sowing.	Date of Germination.	Date of Blooming.	Height at Time of Blooming.	Remarks.
FORAGE AND GREEN-MANURE CROPS.							
<i>Trifolium alexandrinum</i>	7031	U. S. D. A.	Dec. 24	Jan. 10	May 6	6 in.	All died during the summer.
<i>Trigonella fenum-græcum</i>	7520	U. S. D. A.	Dec. 24	Jan. 12	May 1	15 in.	Planted on red soil. Eaten off by birds, but grew up again. Yielded 20,782 pounds of green stuff per acre.
<i>Trigonella fenum-græcum</i>	7520	U. S. D. A.	Dec. 11	Jan. 10	Apr. 25	6 in.	Of no value on granite soil.
<i>Vicia narbonensis</i>	7532	U. S. D. A.	Dec. 24	Jan. 22	May 1	3 ft.	Planted on red soil. Blown down by wind before cutting. Yielded 79,860 pounds of green stuff per acre.
<i>Vicia narbonensis</i>	7532	U. S. D. A.	Nov. 28	Dec. 20	May 1	6 in.	A failure on granite soil.
<i>Vicia narbonensis</i>	7532	U. S. D. A.	Nov. 28	Dec. 20	May 1	6 in.	Failure on granite soil. Mixed 2 parts of <i>V. narbonensis</i> to 1 of rye.
Rye (<i>Secale cereale</i>)	7531	U. S. D. A.	Nov. 28	Dec. 8	May 1	30 in.	A failure on granite soil. Planted in alternate rows.
<i>Vicia narbonensis</i>	7532	U. S. D. A.	Nov. 28				
Rye (<i>Secale cereale</i>)	7531	U. S. D. A.	Nov. 28				
<i>Vicia species</i>	7521	U. S. D. A.	Dec. 24	Jan. 22	May 30		Yielded 41,745 pounds of green stuff per acre.
<i>Vicia species</i>	7521	U. S. D. A.	Dec. 24	Dec. 15	May 20	12 in.	Of little value on granite soil.
<i>Vicia species</i> (2 parts)	7521	U. S. D. A.	Nov. 28	Dec. 15			Supported by rye to a small extent. Growth of Vetch the same as when sown alone. The same seeds in alternate rows gave the same results on granite soil.
Rye (<i>Secale cereale</i>) (1 part)	7531	U. S. D. A.	Nov. 28	Dec. 8			
GRAINS.							
<i>Secale cereale</i> , rye			Nov. 28	Dec. 8	May 5	30 in.	Of no value.
Barley (original seed)	5793	U. S. D. A.	Dec. 24	Jan. 12	May 15	3½ ft.	Ripe and cut July 9th. Yielded 4,083 pounds of grain per acre.
Barley (first remove)	5793	U. S. D. A.	Dec. 24	Jan. 12	May 20	3½ ft.	Ripe and cut July 9th. Yielded 4,877 pounds of grain per acre.

Oats (second remove) -----	1178	U. S. D. A.	Dec. 24	Jan. 12	June 6	-----	Ripe and cut July 8th. Yielded 1,928 pounds of grain per acre.
Rye -----	7531	U. S. D. A.	Dec. 24	Jan. 12	May 1	4 ft.	Cut July 22d. Yielded 3,516 pounds of grain per acre.
Gluten wheat -----	B 36	Maryland	Dec. 24	Jan. 12	May 31	-----	Cut July 22d. Yielded 1,985 pounds of grain per acre.
Gluten wheat -----	B 30	Home-grown seed	Dec. 24	Jan. 12	May 30	-----	Ripe and cut July 22d. Yielded 2,382 pounds of grain per acre.
Gluten wheat -----	B 129	Home-grown seed	Dec. 9	Dec. 24	May 23	-----	Ripe and cut July 22d. Small yield, on account of depredations of field mice.
Gluten wheat -----	B 151	Maryland	Dec. 24	Jan. 12	June 1	-----	Ripe and cut July 9th. Yielded 1,588 pounds of grain per acre.
Gluten wheat -----	B 153	Home-grown seed	Dec. 24	Jan. 12	May 28	-----	Ripe and cut July 9th. Yielded 2,268 pounds of grain per acre.
MISCELLANEOUS.							
Oxalis crenata -----		Berkeley	April 18	-----	-----	-----	Made 12 inches growth. Died down without producing new tubers.
Polygonum tataricum -----		Iowa	Mar. 17	Mar. 31	June 5	24 in.	

THE ORCHARD.

The following notes on the bearing of the orchard were compiled and tabulated by Foreman J. H. Barber:

The fruit season of 1902 was unusually favorable, and all standard fruits bore more or less of a crop.

Apples.—The following apples on red soil bore over fifty pounds to the tree:

Varieties.	Crop per Tree.	Average Weight of Fruits.	Quality.
Jonathan.....	89 lbs.	3 oz.	Poor; too small.
Ben Davis.....	70 "	5 "	Showy, but of poor quality.
Fameuse.....	69 "	2½ "	Good, but too small.
Haas.....	65 "	4 "	Poor; corky.
Ribstone Pippin.....	60 "	4½ "	Good.
Maiden's Blush.....	57 "	3½ "	Fair.
Roxbury Russet.....	55 "	3½ "	Fair.

On the granite soil the varieties bearing over fifty pounds were as follows:

Varieties.	Crop per Tree.	Average Weight of Fruits.	Quality.
Clayton.....	279 lbs.	4 oz.	Good keeper.
Beauty of Kent.....	150 "	4 "	Poor.
McMahan's White.....	114 "	5 "	Good, juicy; sprightly flavor.
Hawthornden.....	102 "	4 "	Fair summer apple.
Yellow Newtown.....	77 "	4 "	Not thinned enough. Good quality.
Swaar.....	70 "	5 "	Fair.
Benoni.....	70 "	3 "	Poor.
Ingram.....	67 "	4 "	Good.
White Astrachan.....	60 "	6 "	Good.
Perry Russet.....	60 "	5 "	Fair.
Anisim.....	60 "	4 "	Rather insipid.
Belle de Boskoop.....	60 "	6 "	Good. Excellent cooker.
Gravenstein.....	53 "	3½ "	Too small.
Ortley.....	53 "	5 "	Good. Keeps well.
Transcendent Crab.....	171 "	.....	Fair jelly crab.

Pears.—Of pears on red soil only six trees bore over fifty pounds. They were as follows:

Varieties.	Crop per Tree.	Average Weight of Fruits.	Quality.
Amalis.....	70 lbs.	6 oz.	Fair.
Forelle.....	63 "	4 "	Poor.
Hardy.....	68 "	5 "	Good.
Keiffer.....	125 "	6 "	Fair.
Madeleine.....	55 "	small	Fair.
Nouveau Poiteau.....	90 "	5½ oz.	Shriveled before it became mellow.

A small Bartlett tree had 15 pounds of good fruit; Howell, 42 pounds of fine quality; Gansell's Bergamotte, 27 pounds; Pitmaston's Duchesse, 43 pounds; Sheldon, 22 pounds, and White Doyenne, 40 pounds of delicious fruit of the first quality.

There are only a few pears planted on granite soil. Only one tree had over fifty pounds, viz., Conseiller de la Cour, 59 pounds. Cole bore 25 pounds and Winter Seckel 28 pounds of good fruit; the former was large; the latter, as usual, though small, was of fine flavor.

Quinces.—The quinces are evidently on too dry a spot. None bore as much as fifty pounds. The best were: Orange, 46 pounds, averaging 6 ounces apiece; Rea's Mammoth, 39 pounds, averaging 5½ ounces;

Champion had 34 pounds, Angers 33 pounds, and Chinese 30 pounds, averaging 7, 5, and 6 ounces apiece respectively.

Almonds.—Languedoc and Drake's Seedling were again the best bearers, with 41 and 32 pounds respectively. Nonpareil had 20 pounds, Pistache 12 pounds, and Texas Prolific 10 pounds. The quality was good except in the case of Nonpareil, which did not fill well.

The almonds on the granite soil near the canal, bore only a few or no nuts. The location is low and subject to frost.

Apricots.—Beauge on granite soil headed the list with 107 pounds per tree, averaging 8 to the pound.

Moorpark, on granite soil, had 55 pounds, averaging 6 to the pound, and fine fruit.

On the red soil, De Coulorge bore 62 pounds and Royal 30 pounds, each averaging 8 to the pound.

Montgamet again had the largest fruit, averaging 5 to the pound, but the tree bore only 21 pounds.

The earliest to ripen was Oullin's Early, a form of the Peach apricot. It began July 4th, a week earlier than the Peach.

Peaches.—Peaches bearing over fifty pounds in 1902 were as follows, in order of ripening:

Variety.	Ripening Season.	Crop per Tree.	Average Weight of Fruits.
Briggs's Red May	July 8 to July 15	73 lbs.	4 oz.
Ulatis	" 10 " " 15	57 "	5 "
Jennie Worthen	" 13 " " 18	52 "	4 "
Early Rivers	" 25 " " 30	51 "	4 "
California tree (?)	Aug. 7 to Aug. 20	53 "	6 "
Foster	" 15 " " 22	90 "	4 "
Crawford's Early	" 26 " " 31	53 "	3 "
Tuscany	Sept. 1	54 "	2 "
Elberta	" 1 to Sept. 9	79 "	4½ "
McKevitt Cling	" 2 " " 5	53 "	4 "
Wheatland	" 2 " " 8	62 "	3½ "
Mrs. Brett	" 2 " " 16	66 "	4 "
Runyon's Orange Cling	" 3 " " 6	60 "	4 "
Albright's Cling	" 4 " " 9	163 "	8 "
Seller's Cling	" 10 " " 20	81 "	4½ "
Newington Cling	" 12 " " 22	76 "	4 "
Beer's Smock	" 13 " " 24	86 "	5½ "
Picquet's Late	" 13 " " 27	51 "	4½ "
Salway	" 23 to Oct. 12	80 "	5 "
Henrietta No. 3	" 25 " " 7	52 "	6 "
Wager	" 28 " " 13	146 "	5 "
Henrietta	" 30 " " 9	125 "	5 "
Henrietta No. 2	" 30 " " 8	71 "	5 "

Briggs's May was the best of the early half-cling varieties. Of the yellow freestones, Crawford's Early and Wheatland were too small. Foster was better in size, and of excellent quality. Among mid-season clings, Albright's was easily the best; the others in the list were too small for the general market, although they found ready sale locally. The quality was first class. Salway and Wager were firm, late, yellow freestones of high quality, well suited for canning, and Henrietta is a fine solid yellow cling for the same purpose.

Nectarines.—The five varieties of this fruit are next to the station fence, and most of the crop is therefore always taken by squirrels. Victoria and Early Newington are the most promising kinds.

Plums and Prunes.—Of the plums on red soil only one tree bore over 50 pounds, Duane's Purple, which had 60 pounds of large plums. The next best on this soil were St. Catherine, 47 pounds; Grand Duke, 41 pounds; Diamond, 24 pounds; Uncle Ben, 24 pounds; Diapree Rouge, 21 pounds; Jefferson (2 trees), 78 pounds; Victoria (3 trees), 124 pounds. Several trees of the French prune bore only a few fruits apiece.

The plums on granite soil did much better, as shown by the following list of the best bearers:

Variety.	Ripening Season.	Crop per Tree.	Number of Fruits per Pound.
Bassford's Prune	Aug. 23 to Sept. 5	53 lbs.	8
Brignole	Sept. 13 " 21	50 "	14
Burbank	Aug. 12 " Aug. 20	193 "	8
Grand Duke	Sept. 14 " Sept. 18	66 "	11
Kelsey	" 8 " 15	45 "	8
Ontario	Aug. 8 " Aug. 15	37 "	10
Pond's Seedling	Sept. 1 " Sept. 10	45 "	8
Red Magnum Bonum	Aug. 22 " Aug. 26	65 "	9
Royal Hative	July 31 " 14	55 "	15
Winesour	Aug. 15 " 21	70 "	25

Diamond on the granite soil bore 37 pounds. This is an exceptionally good jelly plum, making a fine, highly-colored, tart jelly of the same type as that made from Pond's Seedling (Hungarian prune), and it is superior in flavor.

Five varieties of French prune—d'Agen, Lot d'Ente, Puymirol d'Ente, Mont Barlot d'Ente, and Robe de Sergent—bore good crops, but the fruit all shriveled on the trees before maturing. Exceptions were one tree of Puymirol and one of Robe de Sergent, which ripened respectively 29 and 36 pounds of good fruit. All the prune trees were healthy and vigorous, and made a good growth of wood.

Cherries.—The cherries, as a rule, bore well, although the season was late. Among standard varieties the best were as follows on granite soil:

Variety.	Ripening Period.	Crop per Tree.
California Advance	May 25 to June 1	30 lbs.
May Duke	June 3 " 12	70 "
May Duke No. 2	" 5 " 15	80 "
English Morello	" 27 " July 8	70 "
Baumann's May	May 26 " June 1	200 "
Early Rivers	" 30 " 4	54 "
Belle d'Orleans	" 31 " 5	200 "
Coe's Transparent	June 2 " 12	90 "
Knight's Early Black	" 6 " 15	75 "
Werder's Early Black Heart	" 11 " 16	70 "
Elton	" 12 " 18	50 "
Napoleon (Royal Ann)	" 15 " 29	90 "

Olives.—Manzanillo continues to be the best general purpose olive at this station. Its early ripening (late October to early November) adapts it particularly for locations subject to early winter frosts. Mission No. 1 bears larger crops, but ripens a month later. Uvaria and Atroviolacea, both ripening about the same time as the Manzanillo (somewhat earlier), are still to be recommended as profitable oil varieties. They are too small for pickles. Lucques continues to bear well, and yields a good percentage of oil, which in pressing is found to separate from the pulp with unusual ease. The above varieties bore as follows in 1902:

Variety.	Began to Ripen.	Crop per Tree.
Manzanillo	Nov. 13	65 lbs.
Mission	Dec. 5	145 "
Uvaria	Nov. 1	84 "
Atroviolacea	Oct. 28	75 "
Lucques	Dec. 5	155 "

Figs.—Only three varieties ripened a first crop—Breba, ripe July 15th, 35 pounds; Petrovaca or San Pedros, ripe July 17th, 20 pounds; Monaca Bianca, ripe July 24th, 45 pounds. The first two bear no second crop here, but Monaca Bianca bears a large main crop, and is one of the most useful figs at this station.

Those ripening a main crop of fifty pounds or over are listed below:

Variety.	Began to Ripen.	Crop per Tree.
Dorée Narbus	Aug. 18	147 lbs.
Black Marseilles	" 23	50 "
Pasteliere	" 24	57 "
White Marseilles	" 25	90 "
Ronde Noire	" 26	112 "
Abondance Précoce	" 26	85 "
White Genoa	" 27	60 "
Rocardi	Sept. 2	50 "
White Adriatic	" 2	125 "
Bourjassotte Gris	" 3	75 "
De Constantine	" 4	100 "
Monaca Bianca	" 5	125 "
Cernica	" 5	50 "
Col di Signora Nero	" 6	50 "
Trojano	" 7	70 "
Zimeia	" 22	50 "

Walnuts.—As might be expected, the walnuts planted near the house, where they receive some seepage irrigation from the lawn, bear the largest crops. In 1902, Bijou had 115 pounds; Dwarf Prolific (*Præpar-turiens*), 58 pounds; Santa Barbara Softshell, 48 pounds, and the Persian or Kaghazi, 20 pounds. The large size of the Bijou nuts attracts much attention from visitors at the station, and many scions of this variety have been distributed.

Mayette, Franquette, and Vourey, receiving no irrigation, bear small crops; in 1902 only 14, 12, and 8 pounds were borne respectively. The nuts, however, are of good size, especially the Franquette, and are of exceptionally delicate flavor.

Chaberte, Serotina, and Madeira bore only 5 to 6 pounds each.

It seems imperative that walnuts on these hill lands be irrigated, in order to produce good crops. With irrigation the outlook for fair crops grows more promising as the trees get older, and the quality of the nuts leaves little to be desired.

Persimmons.—The Japanese persimmons continue to bear good crops of fine fruit. Zeyi Maru, a long, pointed variety, with thin skin and jelly-like pulp, is perhaps the best of the varieties here. It begins to ripen early in December and the handsome fruit hangs on the tree until February. It bore 75 pounds in 1902; the other kinds varied from 50 to 100 pounds.

FERTILIZING HAY CROPS.

During the season of 1901-2 a series of experiments was inaugurated to determine the practicability of raising hay crops by means of fertilizers. The profitable production of hay upon the shallow and thin foothill soils of the station tract has always been a serious problem. The results of the tests of phosphate and nitrate used in combination with lime and without lime, and nitrate used alone, are given below. It will be noticed that nitrate of soda used alone yielded by far the largest money returns per acre. Liming did not pay at all on the wheat and oats plots on

granite soil. The cost of the lime more than exceeded the gain in yield per acre, so that by its addition a loss was incurred. The value of the increase in the yield of barley hay on granite soil fell far short of the cost of the fertilizers.

It is possible that the Thomas phosphate was not available the first season after applying it. The same plots are being tested during the present season, 1902-3, in order to determine whether the phosphate will become more available.

HAY ON RED SOIL.

PLOT 1. $\frac{1}{2}$ acre. Sown November 7, 1901, with 25 lbs. red oats.

100 lbs. Thomas phosphate (800 lbs. per acre) plowed-in Nov. 6, 1901 (before sowing).

10 lbs. nitrate of soda (80 lbs. per acre) applied broadcast January 16, 1902.

10 lbs. nitrate of soda (80 lbs. per acre) applied broadcast March 1, 1902.

Cut for hay June 7, 1902. Good stand, 4 to 5 feet high, but thinned out somewhat by rabbits (plot next to fence).

Yield of hay per acre (good quality), 7,350 lbs.

PLOT 2. Check-plot—same as Plot 1, but not fertilized.

Cut for hay, June 7, 1902. Fair stand, 20 to 24 inches high.

Yield of hay per acre (good quality), 1,996 lbs.

HAY ON GRANITE SOIL.

PLOT 8. $\frac{1}{4}$ acre. Sown November 8, 1901, with 45 lbs. red oats.

150 lbs. Thomas phosphate (600 lbs. per acre)

75 lbs. sulfate of potash (300 lbs. per acre)

375 lbs. air-slaked lime on $\frac{3}{4}$ of plot (2,000 lbs. per acre)

} Plowed-in November 7, 1901
(before sowing).

20 lbs. nitrate of soda (80 lbs. per acre) applied broadcast January 16, 1902.

20 lbs. nitrate of soda (80 lbs. per acre) applied broadcast March 1, 1902.

Cut for hay June 7, 1902. Good stand, $3\frac{1}{2}$ to 4 feet high.

No appreciable difference between portion with lime and balance of plot.

Yield of hay per acre (good quality), 7,623 lbs.

PLOT 3. Check-plot—same as Plot 8, but not fertilized.

Cut for hay June 7, 1902. Fair stand, 20 to 24 inches high.

Yield of hay per acre (good quality), 1,905 lbs.

PLOT 4. $\frac{1}{4}$ acre. Sown November 8, 1901, with 40 lbs. white Australian wheat.

150 lbs. Thomas phosphate (600 lbs. per acre)

75 lbs. sulfate of potash (300 lbs. per acre)

500 lbs. air-slaked lime (2,000 lbs. per acre)

} Plowed-in Nov. 7, 1901 (before sowing).

20 lbs. nitrate of soda (80 lbs. per acre) applied broadcast January 16, 1902.

20 lbs. nitrate of soda (80 lbs. per acre) applied broadcast March 1, 1902.

Cut for hay June 10, 1902. Thick stand, 4 to 5 feet high.

Yield of hay per acre (good quality), 6,715 lbs.

PLOT 5. Check-plot—same as Plot 4, but not fertilized.

Cut for hay June 10, 1902. Good stand, $2\frac{1}{2}$ to 3 feet high, but only slightly stooled.

Yield of hay per acre (good quality), 2,359 lbs.

PLOT 6. $\frac{1}{4}$ acre. Sown November 8, 1901, with 45 lbs. common barley.

Fertilizers same as Plot 4, applied at same time and in same manner.

Barley was nipped by frosts in December, but not seriously injured.

Cut for hay May 27, 1902. Good thick stand, averaging about 3 feet high.

Yield of hay per acre (good quality), 3,812 lbs.

PLOT 7. Check-plot—same as Plot 6, but not fertilized.

Barley nipped by December frosts, same as Plot 6.

Cut for hay May 27, 1902. Thin stand, only $1\frac{1}{2}$ to 2 feet high.

Yield of hay per acre (good quality), 1,905 lbs.

SUMMARY.

PLOT	SOIL.	SEED.	TREATMENT.	PER ACRE.				
				Yield of Hay.	Gain from Fertilizers.	Value of Fertilizers, including Freight to Jackson.	Value of Increase in Product, at \$10 per Ton.	Profit or Loss.
1	Red	Oats	Fertilized	<i>lbs.</i> 7,350	<i>lbs.</i> 5,354	\$15	\$26 70	\$11 70 (profit)
2	Red	Oats	Not fertilized	1,996	-----	-----	-----	-----
8	Granite	Oats	Fertilized	7,623	5,718	\$31 (incl. lime \$10)	28 50	2 50 (loss)
3	Granite	Oats	Not fertilized	1,905	-----	-----	-----	-----
4	Granite	Wheat	Fertilized	6,715	4,356	\$31 (incl. lime \$10)	21 80	9 20 (loss)
5	Granite	Wheat	Not fertilized	2,359	-----	-----	-----	-----
6	Granite	Barley	Fertilized	3,812	1,907	\$31 (incl. lime \$10)	9 50	21 50 (loss)
7	Granite	Barley	Not fertilized	1,905	-----	-----	-----	-----

NITRATE OF SODA USED ALONE.

PLOT X. Balance of field, north of ditch (granite soil) outside of plots enumerated above.
 Sown to red oats at same rate and date as Plots 8 and 3.
 80 lbs. nitrate per acre, applied broadcast March 1, 1902.
 Cut for hay June 7, 1902. Good stand.

Yield of hay per acre (good quality)	5,263 lbs.
Yield of check-plot on same soil (Plot 3)	1,905 lbs.
Gain from 80 lbs. nitrate per acre	3,358 lbs.
Value of increase at \$10 per ton (current rate)	\$16 80
Cost of 80 lbs. of nitrate delivered at Jackson	1 95
Profit on fertilizer per acre	\$14 85

PLOT V. Field south of ditch; granite soil.
 Sown to red oats November 20, 1902.
 80 lbs. nitrate per acre, applied broadcast April 5, 1902.
 Cut for hay June 12, 1902.

Yield of hay per acre	5,227 lbs.
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CHECK-PLOT. Part of same field, not fertilized.
 Sown and cut at same dates.

Yield of hay per acre	1,742 lbs.
Gain from 80 lbs. nitrate per acre	3,485 lbs.
Value of increase at \$10 per ton	\$17 42
Cost of nitrate delivered at Jackson	1 95
Profit on fertilizer per acre	\$15 47

SOUTHERN COAST RANGE SUBSTATION.

Near Paso Robles, San Luis Obispo County.

The report of the work of this station will necessarily have to be very brief. Its work was practically closed and the station was largely dismantled in March, 1902. At that time Mr. J. W. Neal resigned the foremanship to take a similar position at the Government experiment station in Alaska. The horses, wagons, and many of the implements were removed or sold, and Mr. J. H. Ooley was appointed workman-in-charge, to act mostly in the capacity of care-taker until the question of discontinuing the station could be definitely settled. All definite experiments, with the exception of the gluten-wheat tests, begun several years ago in cooperation with the U. S. Bureau of Chemistry, and a few test plots of saltbushes, were discontinued. Orders were given Mr. Ooley simply to plow and cultivate the young orchard at the rear and a portion of the vineyard, which, according to the map of 1901 (see Bulletin No. 147, p. 29), were allowed to remain, in the hope that some definite data could be secured from them.

The people of the district are not satisfied with the station. Upon the writer's first visit to the station last year, he chided several of the residents of the Paso Robles district with a lack of interest in the work of the station, which was located in their midst especially for the purpose of assisting in the solution of some of the problems confronting them. The reply was that nothing but negative results had ever been secured at the station. There is, therefore, a lack of appreciation of the value of knowing what can not be done. Some are unreasonable enough to assert that the station has even done great harm to the district by the publication of its record of failures. We can not afford to attempt to answer all of these statements. They are given here simply as a matter of record to serve in the future as an indication of what is to be expected when anything but positive results are obtained from our experiments.

The statement that nothing but negative results have been obtained at this station is hardly true and fair to those who have had charge of the work in the past. The demonstration of the adaptability of the Australian saltbush to dry non-alkaline soils is one of the achievements of the Southern Coast Range substation. The results of this demonstration have not received the wide recognition by the farmers of the district that they should. While some farmers are growing the plant for forage, and find it very valuable under their conditions, there are many more who could use it to great advantage.

Another of the positive results of the station's work is the demonstration of the fact that the hard wheats grown there have maintained their high gluten percentages to a larger extent than they have in any other district where they have been planted in California. This fact has been brought out by the gluten-wheat tests which have been maintained in cooperation with the U. S. Bureau of Chemistry during the past three years. This fact is significant, and would indicate the possibility of the use of macaroni wheats as a special and more profitable crop in the district. Attempts will be made in the future to introduce the cultivation of macaroni wheats on a scale sufficiently large to give the results of the

experiment a practical bearing. It is hoped that the coöperation of several large wheat-growers can be obtained. It is also hoped that the necessary seed can be obtained from the U. S. Department of Agriculture.

CLIMATE.

The recording of meteorological data has been faithfully maintained at this station, despite the fact that much of its active work has been discontinued. The records show the past two seasons to be no exceptions to the rule that the climate of this region is a very trying one for all cultivated plants.

The rainfall for the past two seasons was below the average (15.88 inches) as shown by the records of the station and Paso Robles for the past seventeen years. The rainfall for the past six seasons is shown by the following table:

SEASONAL RAINFALL AT PASO ROBLES.

Seasons of—	1897-8.	1898-9.	1899-00.	1900-1.	1901-2.	1902-3.	Average.
September .....	.03	.10	trace	trace	.04	0.00	.28
October .....	.56	.13	2.55	1.54	1.57	1.08	1.26
November .....	.05	.30	1.40	6.10	1.04	.71	1.60
December .....	.23	.27	2.55	.25	.....	.96	.71
January .....	.82	4.16	2.11	6.11	1.05	2.19	2.74
February	1.55	.08	.08	5.37	5.32	1.35	2.29
March .....	.83	4.99	1.90	.63	2.50	4.16	1.50
April .....	.....	1.37	.42	1.37	1.23	.79	.86
May .....	.68	.....	.67	1.43	.....	.....	.46
Totals	4.75	11.40	11.40	22.80	12.75	11.24	12.44

It will be noticed that the average for the past six seasons is considerably below the general average. During the past two seasons the late rains, which usually come during April and May, have been notably deficient. To make matters worse, this shortage was accompanied by exceedingly dry north winds, which coming, as they did, at the time that crops could withstand them least, prevented a large proportion of the heads of the grain from filling. At the station this lack of filling was especially severe. Many of the grain plots failed to produce seed. That the effects of these late droughts can be overcome to a large extent by using a "summer fallow" system, was strikingly illustrated during the past season by Mr. C. E. Cliff, whose farm adjoins the station tract. Mr. Cliff's grain on summer-fallowed land grew well, headed early, and filled well, despite the deficiency of late rains. Mr. Cliff goes over his land during the summer in order to keep down weed-growth and conserve the moisture. The favorable effects of this treatment were amply shown the past season.

The accompanying table shows the complete meteorological record taken at the station during the past eighteen months. The table shows both winters to have been very severe. During the year 1902 there were only three months during which 32° was not registered. The number of days when 32° or below was registered was ninety-nine during the past season. Eight frosts are recorded for March, seven for April, and three for May.

METEOROLOGICAL RECORD AT THE SOUTHERN COAST RANGE SUBSTATION—JANUARY 1, 1902, TO JUNE 30, 1903.

MONTH.	Mean Monthly Maximum.....	Mean Monthly Minimum.....	Mean Monthly Range.....	Extreme Maximum with Dates.....	Extreme Minimum with Dates.....	Number of Days 90° or Over.....	Number of Days 32° or Below.....	Rainfall During Month.....	Number of Days when Rain Fell.	Number of Cloudy Days.....	Number of Partly Cloudy Days.....	Number of Clear Days.....
1902—January.....	58.54°	29.48°	29.06°	69°—1st	19°—30th	0	21	1.05	3	8	12	11
February.....	59.39	39.10	20.29	72—15th	24—1st	0	7	5.32	10	12	7	9
March.....	60.00	33.67	26.33	75—30th	28—3d, 24th	0	15	2.50	9	2	5	24
April.....	68.03	37.53	30.50	84—15th	27—2d, 3d	0	7	1.23	3	0	12	18
May.....	73.51	40.80	32.71	86—24th, 27th	32—3d, 14th, 20th	0	0	0.00	0	4	4	23
June.....	89.63	44.16	45.13	105—9th	36—1st, 4th	16	0	0.00	0	0	1	29
July.....	91.61	46.61	45.09	109—23d	40—6th, 7th, 11th	21	0	0.00	0	2	2	27
August.....	86.38	44.61	41.77	105—2d, 31st	38—20th, 26th, 28th, 30th	12	0	0.00	0	0	3	28
September.....	89.70	43.06	46.63	110—1st	32—30th	16	1	0.00	0	1	6	23
October.....	73.61	39.45	34.16	93—15th	32—3d	1	1	1.08	3	8	6	17
November.....	60.00	32.96	27.04	74—2d	21—30th	0	15	0.71	2	7	6	17
December.....	55.96	29.64	26.32	66—7th, 8th, 24th, 25th	18—31st	0	21	0.96	2	11	3	17
1903—January.....	58.19	31.29	26.90	68—6th	19—15th	0	20	2.19	7	5	7	19
February.....	55.64	27.82	27.82	68—20th, 28th	15—15th	0	23	1.35	5	2	8	18
March.....	58.70	38.32	20.38	70—21st, 22d	20—6th	0	8	4.16	12	10	14	7
April.....	67.66	36.86	30.80	84—30th	29—12th	0	7	0.79	3	5	1	24
May.....	78.38	41.00	37.38	102—30th	30—22d	4	3	0.00	0	0	4	27
June.....	89.46	46.70	42.76	106—27th	68—15th	17	0	0.00	0	0	6	24

GLUTEN AND MACARONI WHEATS.

The growth of "gluten wheats" was continued during the past two seasons. For the season of 1901-2 the following table shows the rate of yield for the several varieties:

Variety.	Sown 1901.	Harvested 1902.	Yield at the Rate per Acre of
No. 5493 -----	Nov. 8	June 25	845 lbs.
No. 151 B -----	" 8	" 25	835 "
No. 36 B -----	" 8	" 25	890 "
No. 5145 -----	" 9	" 25	855 "
No. 5486 -----	" 9	" 25	900 "
No. 3823 -----	" 9	" 25	Failed to fill.

Samples of these grains were sent to Washington for analysis, and a portion was reserved for this season's planting. In accordance with instructions received from Washington, the numbers of the samples were changed in order to conform to the system adopted by the Bureau of Chemistry, which gives new numbers for the grain produced each year. No. 151 B became 205 B, No. 36 B became 180 B, No. 131 B became 227 B, No. 155 B became 204 B, No. 5145 retained its old number. In addition to these, seed of Tulare-grown wheat was received and planted at this station and was designated No. 183 B. The Tulare-grown seed was from a similar series of gluten wheats under trial at the San Joaquin Valley substation, which were found to have lost their high gluten content. This grain is to be tried at this station in order to determine whether it will improve in the Paso Robles climate and soil. Another sowing of old seed of No. 3823 was made. At this writing, it seems that this valuable series of experiments will be broken. The unfavorable weather conditions prevented the filling out of the grains. An attempt will be made by careful hand picking to secure sufficient seed for analysis and for next season's planting; but it is extremely doubtful whether any seed will be obtained.

Three varieties of macaroni wheats were received from Cerealist Carleton, of the U. S. Department of Agriculture, last fall and small plots of each were sown. The plants grew well during the season, but owing to the lack of late spring rains, together with heavy north winds, the heads did not fill well. Very little grain will be produced.

MISCELLANEOUS CULTURES.

Several saltbushes and forage grasses new to the district were planted in November, 1902. These were: *Atriplex nuttallii*, Wats.; *Atriplex canescens*, James; *Atriplex* species; *Atriplex polycarpa*, Wats.; *Atriplex coronata*, Wats.; *Melinis minutiflora*, Molasses-grass; *Arrhenatherum elatius*, Tall Oat-grass; *Paspalum dilatatum*, Australian Water-grass; *Festuca arundinacea*, Reed fescue. Owing no doubt to unfavorable weather conditions following the sowing, the seeds failed to start.

Other saltbushes, especially *Rhagodia spinescens inermis*, *Atriplex cachiuyum*, *A. pamparum*, and *A. nummularia* grew very well without irrigation during the summer, forming compact bushes from 3 to 4 feet high. They all withstood the rather severe winter frosts very well. They should, therefore, prove valuable as both summer and winter browsing plants, and as such deserve further trial.

Seed of fenugreek (*Trigonella fœnum-græcum*), received from the Division of Plant Introduction and Distribution, was sown as a green-manure crop in the orchard. Two acres of orchard were sown. Two sowings were made; one before rain had fallen in October, and the other after the first rains fell. The seed came up well in both cases. No visible difference could be detected between the dry-sown and that sown after the rains. Both plots were severely injured during the winter, most of the plants being killed to the ground. At the opening of the growing season those plants which survived the winter frosts averaged less than five inches in height. No nodules were found upon the roots, and attempts to inoculate the soil after the plants had started to grow in the spring failed. Before this plant is recorded as a failure in this region it should be tested upon well-inoculated plots.

THE ORCHARD AND VINEYARD.

As shown by the map published by Inspector Shinn (Bulletin No. 147, p. 29) a large portion of the orchard and vineyard was grubbed out. The remaining orchard and vineyard plots as indicated by the map for 1901 still remain, and have been cared for in the hope that further data of value regarding them could be obtained. The young orchard of hardy varieties of pears and apples at the rear of the station tract was given especial care and attention. During the season of 1902, all of these young trees made a splendid growth and some of them bore a few fruits. A record of the blooming of the trees was kept last spring, which shows that while many of the trees bloomed profusely, very little fruit was set, owing, no doubt, to the unfavorable weather conditions.

A noteworthy point was observed last season regarding the bearing of a number of Bartlett pear trees which originally were planted as avenue trees along the main road leading to the rear of the tract. These trees were set in 1894. They grew slowly, however, and are not at present more than half as large as they should be. In addition, they show plainly the effects of unfavorable soil conditions (hardpan). Last season, for some reason, these trees bore a very heavy crop of small fruits, nearly all of which was produced upon the wood of the previous season. The bearing of these trees more nearly resembled that of the peach than that of the pear. The fact is worthy of mention, as it indicates that the trees have been subjected to unusual stress of climatic and soil conditions.

The first crop of grapes suffered severely in 1902 from late frosts; but a fair second crop was produced. Not a pound of sound grapes was obtainable, however. Practically every berry was destroyed or eaten, before it was half ripe, by linnets which visited the station in immense flocks. The depredations of these feathered enemies have always formed one of the most serious drawbacks to fruit and grape production in the neighborhood of the station tract. Now that most of the orchards and vineyards in the vicinity of the station have been grubbed out, the station plots form the only available feeding grounds for the birds.

SAN JOAQUIN VALLEY SUBSTATION.

Near Tulare, Tulare County.

The report of the work of this station for the season of 1901-2 will have to be very brief. The season was one of the most trying which has been experienced in some years. The rainfall was short, and this, coupled with very hot weather, rendered the test-plot cultures practically all absolute failures. Some barley hay was produced upon the station grounds, but the crop was very small. On the alkali test-plots only a few stalks of barley survived. If a well-equipped pumping plant and a system of distributing pipes had been on hand, it is possible that a different report could be given. The season's experience has shown conclusively the necessity of providing some efficient means of distributing irrigation water in quantities sufficient to be of active use to the plants under trial. The quantity of water which can be raised by the present horsepower outfit is too small at any one time for successful reclamation experiments. Then, too, the present system of distributing the water through a portable pipe-line is troublesome. It is a laborious task to set up the lines; then there is considerable leakage, thus rendering it impossible to secure good results. An engine for raising the water in large quantities, and a permanent pipe-line for distributing the water to the different alkali experimental plots, are absolute necessities, and before active operations begin for the coming season, it is hoped to have a proper pumping plant and pipe-lines installed.

Mr. Julius Forrer continues to act as foreman, and despite the climatic handicap during the season, has succeeded in maintaining the station grounds in excellent condition. Mr. John Tuohy continues to act as patron.

CLIMATE.

The appended table of meteorological data taken at the station during eighteen months, ending with June, 1903, shows the vicissitudes of the climate of the surrounding region. Not only was the rainfall the lowest recorded since 1898, but the temperature ranges were very wide. Temperatures of 90° and over were registered during every month from February to October, inclusive. The effect of these high temperatures upon the small cultures was very trying. Many of them were burned up before they had a chance to secure root-hold.

METEOROLOGICAL RECORD AT THE SAN JOAQUIN VALLEY SUBSTATION—JANUARY 1, 1902, TO JUNE 30, 1903.

MONTH.	Mean Monthly Maximum.....	Mean Monthly Minimum.....	Mean Monthly Range.....	Extreme Maximum with Dates.....	Extreme Minimum with Dates.....	Number of Days 90° or Over.....	Number of Days 32° or Below.....	Rainfall During Month.....	Number of Days when Rain Fell.....	Number of Cloudy Days.....	Number of Partly Cloudy Days..	Number of Clear Days.....
1902—January.....	56.58°	32.00°	23.90°	78°—1st	20°—30th	0	19	0.40	5	12	14	5
February.....	69.14	39.78	29.65	92—16th	24—1st	1	6	2.28	9	10	11	7
March.....	68.00	39.23	28.45	90—30th	32—3d, 4th, 15th	1	3	2.14	6	10	14	7
April.....	75.46	43.66	31.80	90—18th	38—2d, 3d, 8th, 22d	1	0	0.76	4	5	15	10
May.....	80.90	48.90	31.68	92—25th, 26th	40—3d	3	0	0.14	1	3	12	16
June.....	95.53	56.26	39.27	104—8th, 9th, 19th, 20th	46—2d	25	0	0.00	0	1	5	24
July.....	97.54	58.64	38.90	110—23d, 24th	46—3d	26	0	0.00	0	0	6	25
August.....	95.87	57.03	38.84	106—3d	48—27th	27	0	0.00	0	0	8	23
September.....	93.66	54.80	38.86	106—1st	44—26th, 27th, 30th	19	0	0.00	0	1	7	22
October.....	82.25	45.22	37.03	96—3d	38—21st	3	0	0.24	2	2	5	24
November.....	67.86	38.26	29.60	82—7th	30—22d, 26th, 29th, 30th	0	8	1.32	4	3	14	13
December.....	62.26	34.32	27.94	80—7th, 8th	26—15th, 22d, 28th, 29th	0	15	0.50	3	7	10	14
1903—January.....	56.64	34.38	22.26	74—24th	24—15th, 16th, 17th, 18th	0	13	1.60	6	16	14	1
February.....	59.85	32.42	27.43	78—28th	22—14th	0	17	0.68	4	9	6	13
March.....	68.45	42.38	26.07	80—11th	32—1st, 6th, 7th, 18th, 19th	0	5	1.88	14	9	19	3
April.....	74.00	41.46	32.54	83—24th, 30th	30—11th	0	1	0.41	4	2	13	15
May.....	85.22	49.80	35.42	102—30th, 31st	38—22d	13	0	0.00	0	2	8	21
June.....	94.33	58.80	35.53	108—6th, 7th	48—3d, 16th	23	0	0.00	0	2	12	16

THE ORCHARD.

The orchard trees were not distressed by the dry weather, as were the small culture and grain plots. The season, on the whole, was rather a good one for most fruits. In the station orchard the alkali areas continue to enlarge, especially among the apricots, and gypsum will be used to hold them in check as much as possible.

Apples.—The following statistics of the apple trees show the extent to which this fruit is adapted to the locality. It will be seen that good crops of fruit are produced by some varieties. In this connection, it should not be forgotten that the apples, produced under the conditions represented by the station, do not keep well. They must be used soon after they are gathered. The summer temperatures are far too high for this rather delicate-fleshed fruit. Many of the fruits are often badly burned and shriveled on the trees, before they have a chance to become fully ripe. During the year, many of the varieties have been seriously injured by twig blight. Undoubtedly the infection was received from the infected pear trees near-by.

The following table shows the varieties which fruited during 1901-2, listed in the order of their ripening.

Variety.	Ripe.	Crop per Tree.	Average Weight of Fruits.
Alexander.....	July 19	80 lbs.	6.5 ozs.
Red Bletigheimer.....	" 19	170 "	9.7 "
Whitney Crab.....	" 19	88 "	1.5 "
Violet.....	" 25	144 "	7.3 "
Yellow Siberian Crab.....	" 25	70 "	38 per lb.
Keswick Codlin.....	" 25	33 "	3.2 ozs.
Mountain Beauty Crab.....	" 25	50 "	1.0 oz.
White Astrachan.....	" 25	180 "	9.0 ozs.
Bledsoe.....	Aug. 5	70 "	6.0 "
Loy.....	" 22	58 "	6.3 "
Lincoln.....	" 22	145 "	3.0 "
Yellow Bellflower.....	" 22	240 "	5.0 "
Grimes' Golden.....	" 30	230 "	2.8 "
Rhode Island Greening.....	" 30	280 "	5.3 "
Fameuse.....	Sept. 1	167 "	2.9 "
Hoover.....	" 1	135 "	6.4 "
Spitzenberg.....	" 1	135 "	7.0 "
Pewaukee.....	" 20	25 "	7.0 "
Northern Spy.....	" 20	122 "	7.0 "
Missouri Pippin.....	" 20	113 "	3.8 "
Excelsior.....	" 20	75 "	6.0 "
Cooper's Market.....	" 20	25 "	4.0 "
Shirley.....	" 29	145 "	4.3 "
Smith's Cider.....	Oct. 8	9 "	5.0 "
Arkansas Black.....	" 8	26 "	4.8 "
White Winter Pearmain.....	" 9	230 "	4.5 "

Pears.—It is very unfortunate that the blight has made its appearance in the San Joaquin Valley, because the pear has shown itself to be one of the fruit trees best adapted to moderately strong alkali. The blight disease has been especially severe in the station orchard during this season. An attempt was made to hold it in check by cutting back, but in most instances the disease has succeeded in reaching the main limbs of the trees. Many of the trees have, therefore, been permanently disabled and will have to be taken out. The pear blight seems to be especially severe in the San Joaquin Valley. Many orchards have been decimated by it to such an extent that they have been rendered unprofitable. So far, no practical remedy has been found, except the heroic

cutting-out treatment. Where the disease is not especially severe, this treatment may be used to advantage; but where nearly every main branch of the trees becomes infected, there seems to be no alternative except the removal of the trees. It now seems that the only hope of relief lies in the breeding-up of immune varieties, a work which has already been started by Mr. Waite, of the U. S. Department of Agriculture.

In the following list only those varieties are mentioned which produced fifty pounds or more of fruit per tree during the season. Many of the trees produced only a few pounds of worthless fruits.

Variety.	Ripe.	Crop per Tree.	Average Weight of Fruits.
White Doyenne	Sept. 10	180 lbs.	3.1 ozs.
Beurré d'Anjou	" 12	70 "	5.7 "
Doyenne d'Été	" 14	140 "	7.7 "
Le Conte	" 20	56 "	6.0 "
Doyenne du Comice	" 20	75 "	6.7 "
Belle Lucrative	" 20	70 "	4.0 "
Seckel	" 20	105 "	2.7 "
Forelle	" 22	175 "	3.6 "
Idaho	" 22	70 "	16.0 "
Winter Seckel	" 29	60 "	4.3 "
Lawrence	Oct. 4	257 "	4.3 "
Josephine de Molline	" 4	85 "	5.7 "
Beurré Gris d'Hiver	" 4	80 "	3.7 "
Worcester Black	" 4	115 "	12.0 "
Kennedy	" 8	85 "	9.0 "
Conseiller de la Cour	" 8	167 "	6.0 "
Mount Vernon	" 8	275 "	5.6 "
Easter Beurré	" 12	246 "	14.0 "

The absence of the well-known Bartlett, Duchesse d'Angoulême, Flemish Beauty, and Winter Nelis is significant. Bartlett has been completely ruined by the blight. The other varieties were so badly crippled that they all produced less than fifty pounds of fruit per tree. Duchesse d'Angoulême bore only five pounds of fruit, and Winter Nelis only twenty-two pounds.

Apricots.—The few apricots produced during the season were partly destroyed by birds and partly stolen by passers-by. This fruit has never been promising at the station.

Nectarines.—The varieties at the station all bore well during this season. It is reported that this fruit is not of good quality.

Variety.	Ripe.	Crop per Tree.	Average Weight of Fruits.
New White	Aug. 4	194 lbs.	3 ozs.
Hardwick	" 14	280 "	3.3 "
Decoton	" 16	90 "	1.0 oz.
Stanwick	" 18	220 "	1.8 ozs.
Boston	" 20	58 "	2.2 "
Newington	" 20	276 "	2.8 "
Lord Napier	" 20	130 "	2.5 "

Peaches.—Good crops of fruit were borne by nearly all varieties at the station this season. The first to ripen (July 3d) were Governor Garland and Ulatis. The largest crop was borne by Schumacher, which

yielded 550 pounds of fair-sized fruit. The list following is given in the order of ripening:

Variety.	Ripe.	Crop per Tree.	Average Weight of Fruits.
Governor Garland	July 3	200 lbs.	2.6 ozs.
Ulatis	" 3	225 "	3.0 "
Hale's Early	" 23	200 "	3.3 "
Yellow St. John	" 24	225 "	3.2 "
Miss Lola	" 24	50 "	6.0 "
Large Early York	" 29	50 "	2.7 "
Belle Douay	" 29	134 "	2.0 "
Belle de la Croix	" 29	49 "	2.2 "
Cooledge's Favorite	Aug. 1	60 "	2.3 "
Amelia	" 4	100 "	5.1 "
Governor Briggs	" 4	95 "	2.9 "
Bishop's Early	" 4	70 "	4.7 "
Mountain Rose	" 4	50 "	6.1 "
Mary's Choice	" 4	150 "	3.3 "
Jennie Worthen	" 9	75 "	4.5 "
Crawford's Early	" 9	90 "	4.0 "
Yellow Tuscany	" 9	100 "	4.5 "
Chinese Cling	" 9	167 "	3.7 "
Oldmixon Free	" 9	192 "	3.5 "
Burke's Cling	" 9	90 "	4.2 "
Elberta	" 12	155 "	6.7 "
Wheatland	" 12	280 "	6.5 "
Richmond	" 12	150 "	2.9 "
Newhall	" 21	170 "	7.2 "
Lovell	" 25	340 "	4.2 "
Schumacher	" 25	550 "	4.2 "
Oldmixon Cling	" 26	500 "	3.7 "
Brandywine	" 27	116 "	8.4 "
Morris White	" 28	390 "	7.2 "
Crawford's Late	" 28	324 "	4.9 "
Muir	" 28	186 "	5.7 "
Susquehanna	" 30	168 "	6.1 "
McKevitt Cling	Sept. 1	400 "	6.6 "
Lemon Cling	" 1	90 "	3.2 "
Indian Blood	" 1	65 "	4.0 "
Ward's Late	" 4	322 "	3.9 "
Thissell's Free	" 4	279 "	5.1 "
Stump the World	" 4	288 "	4.1 "
Chair's Choice	" 10	225 "	8.0 "
Late Admirable	" 10	169 "	5.9 "
Picquet's Late	" 10	300 "	5.3 "
Seller's Cling	" 10	92 "	7.8 "
Early Rose	" 10	98 "	5.4 "
Blood Cling	" 14	160 "	3.7 "
Beer's Smock	" 18	300 "	4.3 "
La Grange	" 18	270 "	5.9 "
Wilkins' Cling	" 18	92 "	3.6 "
Golden Cling	" 18	75 "	3.2 "
Roseville Cling	" 18	140 "	4.3 "
Snow	" 18	180 "	3.0 "
Grover Cleveland	" 18	112 "	2.6 "
Wonderful	" 18	115 "	3.3 "
Noblesse	" 18	65 "	4.2 "
Lemon Free	" 18	100 "	4.3 "
Salway	Oct. 2	370 "	5.0 "
Henrietta Cling	" 2	275 "	6.3 "

The largest peaches produced during the season were Brandywine, Chair's Choice, Seller's Cling, Newhall, and Morris White, which measured $10\frac{1}{2}$, $9\frac{3}{4}$, $10\frac{1}{4}$, 10, and 9 inches in circumference respectively.

Plums and Prunes.—The following is the list of plums and prunes which bore fruit at the station during 1901-2:

Variety.	Ripe.	Crop per Tree.	Average Weight of Fruits.
Ontario	July 29	130 lbs.	2.0 ozs.
Czar	" 29	100 "	1.3 "
Tragedy	Aug. 16	52 "	1.0 oz.
Yellow Gage	" 16	20 "	1.0 "
Prince Englebert	" 18	75 "	2.0 ozs.
Lucombe's Nonesuch	" 20	86 "	1.9 "
Columbia	" 25	80 "	2.1 "
Petite d'Agen	Sept. 17	60 "	1.2 "
Damson	" 17	60 "	30.0 per lb.
Robe de Sergeant	" 17	90 "	1.3 ozs.
Fellenberg	" 17	70 "	1.0 oz.
Shrophire Damson	" 17	20 "	39.0 per lb.
Diaprée Rouge	" 17	50 "	1.0 oz.
Ickworth's Imperatrice	" 17	150 "	1.5 ozs.
St. Lawrence	" 17	150 "	1.7 "
Jefferson	" 17	35 "	1.3 "
Bryanstone	" 17	160 "	18.0 per lb.
Golden Prune	" 17	40 "	1.3 ozs.
Bavay	" 22	85 "	1.1 "
Green Gage	" 22	40 "	1.2 "
General Hand	" 22	100 "	2.2 "
Silver Prune	" 26	75 "	1.6 "
Victoria	" 28	75 "	1.5 "
Prince of Wales	" 28	75 "	1.0 oz.

THE VINEYARD.

The crop of grapes produced at the station during 1901-2 was one of the largest that it has yet yielded. The vineyard covers about $4\frac{1}{2}$ acres, including some alkali spots upon which the vines have been killed. A total of 32 tons of grapes was gathered this season, or an average of slightly over 7 tons per acre. The vines have not been irrigated for twelve years. Their growth is all that could be desired, except in spots where the alkali is excessively strong. The quality of the fruit is very high. The station vineyard is a practical demonstration of the adaptability of grape-culture to similar soils of the San Joaquin Valley, and its presence has induced a revival of vineyard planting in the district. Many hundreds of cuttings are annually given to intending planters. The surplus stock of cuttings is sold, in order to pay the expense of preparing them. During the season a total of about 150,000 cuttings was distributed.

An exhibit consisting chiefly of one hundred and eight varieties of grapes was made at the District Fair held at Hanford, the latter part of September. The display attracted wide attention and was unanimously voted to be the best one at the Fair. Many very flattering newspaper comments were made regarding the extent and excellence of the exhibit. To Foreman Forrer is due the whole credit for the success of the undertaking.

The writer will not attempt a discussion of the value of the different varieties for specific purposes, as that can and will be done by the station viticulturist, Mr. Twilight. A list of the varieties which fruited during the season follows, showing the average weight of fruit produced per vine.

BLACK GRAPES.

Aramon	78 lbs.	Malbeck	24 lbs.
Aleatico	22 "	Malvasia Rosaria	39 "
Alicante Bouschet	62 "	Mondeuse	36 "
Bago de Bito	28 "	Mataro	27 "
Barbera fina	12 "	Meunier	21 "
Bastardo	32 "	Mission	70 "
Beclan	37 "	Monica	44 "
Black Prince	94 "	Moretto	30 "
Blue Portuguese	18 "	Mourastel	88 "
Bolgnino	34 "	Mourisco preto	10 "
Bollina	28 "	Nebbiolo Bourgu	12 "
Bonarda	22 "	Neiretta	26 "
Bonarda	12 "	Nebbiolo fino	11 "
Cabernet Sauvignon	12 "	Negro Amaro	46 "
Carignane	64 "	Petite Sirah	24 "
Chauché gris	20 "	Petit Verdot	12 "
Chauché noir	20 "	Pinot St. George	29 "
Charbono	41 "	Pinot de Pernand	32 "
Cinsaut	38 "	Quagliano	46 "
Corbeau	23 "	Robin noir	18 "
Cipro nero	49 "	San Giovetto	21 "
Crabb's Black Burgundy	45 "	Serine	16 "
Croetto Moretto	24 "	Spana v. Nebbiolo	32 "
Croetto	29 "	St. Macaire	18 "
Freisa de Monferrato	20 "	Tadone	30 "
Gamai Teinturier	14 "	Tannat	26 "
Grenache	84 "	Teinturier Mâle	10 "
Gros bleu	12 "	Tinta Amarella	29 "
Gros Mancin	17 "	Tinta Cao	12 "
Gros Verdot	15 "	Tinta Madeira	10 "
Herbement	24 "	Tinta Valdepeñas	47 "
Lagrain	32 "	Trousseau	27 "

WHITE GRAPES.

Bakator	47 lbs.	Muscat of Alexandria	40 lbs.
Barbarossa	24 "	Napoleon	86 "
Barbarossa Finalborgo	17 "	Orleans Riesling	40 "
Baswood	26 "	Palomino	44 "
Beba	50 "	Pedro Ximenes	70 "
Boal de Madeira	36 "	Perruno	58 "
Burger	109 "	Peverella	33 "
Chasselas de Fontainebleau	37 "	Pinot Vert doré	28 "
Clairette blanche	38 "	Sauvignon Vert (Colombar)	30 "
Folle blanche	47 "	Sauvignon blanc	12 "
Franken Riesling	22 "	Seedless Sultana	38 "
Feher Szagos	30 "	Semillon blanc	35 "
Golden Chasselas	40 "	Small Muscatel	20 "
Green Hungarian	27 "	Thompson's Seedless	25 "
Huasco	44 "	Ugni blanc	70 "
Kleinberger	30 "	Verdal	72 "
Luglienga	32 "	Verdelho	23 "
Malmsey	76 "	Vernaccia Sarda	23 "
Malvasia bianca	23 "	West's White Prolific	53 "
Mantuo de Pilas	65 "	White Malaga	40 "
Marsanne	50 "	White Vernaccia	30 "
Mourisco branco	75 "		

Gros Mancin, St. Macaire, Tannat, Gros Verdot, Gros blanc, Petit Verdot, Teinturier Mâle, Herbement, Bonarda, Tinta Amarella, Trousseau, Tinta Cao, Tinta Madeira, and Robin Noir are all on strong alkali. Some of the vines of these varieties have been killed. Those which have survived are not as vigorous as those on better soil, and it is fair to presume that their production is low in consequence.

SOUTHERN CALIFORNIA SUBSTATION.

The operations at this station were seriously interfered with during the season of 1901-2, by the shortage of water. Owing to the series of dry years which have prevailed throughout southern California for the past five years, the shortage of water has come with especial severity at the Southern California substation. The station's 3-inch supply was cut off, and water had to be purchased. This would not have been so bad if an adequate supply of water had been obtainable. The stream of water which reached the station reservoir via the Chino Ranch system never averaged over a $1\frac{1}{2}$ -inch flow. In addition, the small pipe-line often failed to carry sufficient water to reach the station, whenever water was being taken out by the neighbors above. Frequently the station was without water for several days.

The shortage of water made it necessary to limit irrigation. The test-plots suffered most. The available water was given to the citrus and other fruit trees, so that they might be maintained, even at the sacrifice of the smaller cultures. A large part of the unfavorable results with the small cultures during the season must be attributed to this fact.

Fortunately we were able, before the close of the year, to open negotiations with a neighbor, who owns a good well near the station boundary-line. From this source, water can be secured in ample quantity, and it is hoped that no further difficulty will be experienced, at least for some time to come.

No change has been made in the management of the station during the year. Mr. J. W. Mills continues to act as foreman, and Mr. S. N. Androus as patron. The officers of this station, especially the foreman, have greater responsibility than is the case with any of the other outlying substations. The distance from the Central Station renders the presence of a fully qualified foreman at this substation doubly imperative. The foreman is compelled to maintain a rather extensive correspondence, in order to answer the many inquiries which daily come to him. The present foreman, Mr. Mills, has succeeded in gaining the confidence of the farmers and fruit-growers of the southern section of the State to an extent highly creditable to himself and to the University.

CLIMATE.

Since the climate of the district represented at the station was fully discussed in Inspector Shinn's closing report (Bulletin No. 147, pp. 63-64), it is unnecessary to make any further remarks upon the subject at this time. The appended table continues the record up to the end of June, 1903.

METEOROLOGICAL RECORD OF THE SOUTHERN CALIFORNIA SUBSTATION—JANUARY 1, 1902, TO JUNE 30, 1903.

MONTH.	Mean Monthly Maximum.....	Mean Monthly Minimum.....	Mean Monthly Range.....	Extreme Maximum with Dates.....	Extreme Minimum with Dates.....	Number of Days 90° or Over.....	Number of Days 32° or Below.....	Rainfall During Month.....	Number of Days when Rain Fell.....	Number of Cloudy Days.....	Number of Partly Cloudy Days.....	Number of Clear Days.....
1902—January.....	68.50°	37.50°	30.77°	86°—3d	28.0°—30th.	0	3	1.92	4	5	7	19
February.....	67.00	41.30	25.16	81—16th, 19th	30.0—1st	0	2	3.35	6	7	5	16
March.....	69.80	40.50	29.06	84—17th	31.0—25th	0	1	3.85	7	10	12	9
April.....	76.60	44.60	25.30	89—13th	38.0—3d, 9th	0	0	0.25	2	2	20	8
May.....	83.80	47.30	32.70	90—6th	40.0—21st, 23d	1	0	0.10	1	2	16	13
June.....	90.20	54.80	35.40	112—23d	42.0—2d	17	0	0.23	2	0	19	11
July.....	90.13	57.80	32.33	103—13th, 23d	48.0—3d	16	0	0.00	0	0	25	6
August.....	90.77	56.77	34.00	103—1st	47.0—29th	18	0	0.00	0	0	23	8
September.....	89.83	55.80	34.03	102—1st	48.0—27th	17	0	0.00	0	0	19	11
October.....	76.60	48.50	28.10	86—5th, 15th	42.0—31st	0	0	0.00	0	4	9	18
November.....	66.83	40.73	26.10	82—2d	32.5—21st	0	0	1.22	2	2	15	13
December.....	62.74	37.96	24.78	77—8th	31.0—15th, 31st	0	4	2.39	5	6	2	23
1903—January.....	66.48	40.00	26.48	81—5th	32.0—30th	0	2	1.34	4	4	12	15
February.....	63.28	35.00	28.28	78—21st	26.0—14th	0	10	2.11	3	5	9	14
March.....	67.74	42.93	24.81	78—11th, 27th	33.0—2d, 18th	0	0	7.24	10	11	10	10
April.....	72.80	46.73	26.17	85—30th	39.0—13th	0	0	3.43	2	5	10	15
May.....	76.25	50.96	25.29	93—29th	39.0—22d	3	0	0.00	0	11	17	3
June.....	86.63	55.53	31.10	99—5th	47.0—3d	7	0	0.00	0	0	22	8

TEST-PLOT CULTURES OF GREEN-MANURE AND MISCELLANEOUS PLANTS.

As stated in the opening remarks above, the results of the season's test-plot cultures were largely vitiated by the shortage of water and the consequent impossibility of applying irrigation in order to carry the plants through the dry season. Whatever favorable results were secured, however, are doubly significant.

The following notes on the several plants under trial during the season are given in order to place the results on permanent record:

Lupinus termis, U. S. D. A. No. 7022. Sown November 22, 1901. A poor stand was obtained, owing to dry weather. This planting must be considered a failure. The plants grew no higher than 6 inches. A second sowing made February 3, 1902, gave a good stand. The plants averaged about 4 inches high at blooming. On the whole, the plant is not a promising one for this district.

Lupinus albus, Palermo White Lupin, No. $\frac{141}{01}$. Seed received from Palermo, Butte County. The first sowing, made in November, 1901, yielded a very poor stand, and the plants made only a poor, stunted growth. Maggots injured the buds. A second sowing, made February 3, 1902, yielded a good stand and good growth. From 4,800 square feet (a little more than one tenth acre) 90 pounds of seed were gathered, although a large quantity of the seed was lost by the pods bursting and throwing their seeds. The plant may be considered a promising one for summer green-manure growth.

Lupinus luteus, Yellow Lupin, U. S. D. A. No. 7525. Two sowings were made, one in November, 1901, and one in February, 1902. Both yielded poor stands and very poor growth.

Vicia narbonensis, Narbonne Vetch, U. S. D. A. No. 7532. The first sowing, made November 22, 1901, yielded a poor stand, which grew tall and spindling. It was severely checked by dry weather. A second sowing, made February 3, 1902, was also very poor. The plants were badly injured by leaf blight. The species can not be considered a promising one for green-manure in this district.

Vicia sp., Vetch, U. S. D. A. No. 7521. Two sowings, made in November, 1901, and February, 1902, yielded very poor stands and growth, on account of dry weather.

Lathyrus ochrus, Ochrus Pea, U. S. D. A. No. 7534. The results of both November and February sowings were very poor and unpromising.

Lathyrus tingitanus, Tangier Pea, U. S. D. A. No. 7637. Both November and February sowings yielded unpromising results.

Lathyrus sativus, U. S. D. A. No. 7639. Both November and February sowings yielded good stands, but on account of dry weather the plants failed to make a satisfactory growth.

Trifolium alexandrinum, Berseem, U. S. D. A. No. 7031. The first sowing, made November 22, 1901, gave a very good stand. The growth was poor, the greatest height attained being 4 inches. A second planting, made February 3, 1902, grew to a height of 8 inches. The seed was very foul with mustard and other weed seeds.

Trifolium alexandrinum, Berseem, U. S. D. A. No. 7659. One half acre sown on 10-acre tract, December 18, 1901. A good clean stand was attained. Later, volunteer barley interfered with its growth in spots. It bloomed May 5th when it was 30 inches high. This is the best of the three varieties of Berseem tried at this station, but so far it is not

to be compared with alfalfa as a hay-crop for the Chino Valley damp lands.

Trifolium alexandrinum, Berseem, U. S. D. A. No. 7657. One half acre sown on 10-acre tract, December 18, 1901. The seed was very foul with mustard and other weed seeds. These weeds choked out the clover badly. The plants bloomed April 1st when they were 12 inches high. So far, it is not promising for hay or green-manure.

Trifolium alexandrinum, Berseem, U. S. D. A. No. 7658. One half of this variety was also sown on the 10-acre tract December 18, 1901. The seed was very foul with weed seeds, the growth of which choked out the clover very badly. So far, it is no more promising on the Chino damp lands than is the variety last mentioned above.

Trigonella fœnum-græcum, Fenugreek, U. S. D. A. No. 7520. Sown November 22, 1901. Grew very slowly. The plants were attacked by a blight of the leaves, which caused their total failure.

Secale cereale, Rye, U. S. D. A. No. 7531. Sown with different varieties of vetches November 22, 1901. In one set of plots the seeds were drilled in, in alternate rows 6 inches apart. In another set of plots, the vetch seed was sown broadcast between the rows of rye. The rye made a good growth in all the plots, averaging $5\frac{1}{2}$ feet high. All of the vetches, except *V. narbonensis*, were smothered by the rye. *V. narbonensis* was 24 inches high amongst the rye April 1st.

Cicer arietinum, Chick Pea, U. S. D. A. Nos. 7017 and 7021. Two sowings of each, made in November and February, yielded very poor and unpromising results.

Ervum monanthos, One-flowered Lentil, U. S. D. A. No. 7522. Sown November 22, 1901. The stand and growth were poor until May. At that time growth commenced and proceeded rapidly until July, when the bed was a solid mat. Specimens measured 7 feet long. A second sowing, made in February, 1902, suffered from the drought. This is a promising summer-growing green-manure plant.

Ervum lens, Lentil, U. S. D. A. No. 7523. Two sowings, November and February, gave very poor results.

THE ORCHARD AND VINEYARD.

Foreman Mills reports that the season of 1901-2 was an exceptionally good one for most kinds of fruits. The orchard comprises many varieties of both citrus and deciduous fruits, bearing records of which have been made for over ten years. Full data are therefore on hand which give an accurate idea of the capabilities of the several varieties in the district represented by the station. These data are now being tabulated upon cards to form a part of a catalogue showing the results of the variety tests at the substations. The varieties may therefore be said to have had fair trials, so that those which have proved unfavorable may well be removed. At a later day the data will be published as a special bulletin. The following tables and notes were compiled by Foreman Mills and are presented here to bring the records to date. Only the varieties which produced fifty pounds or more of fruit per tree during the season were thought worthy of mention, and the data have been limited to these. In addition, the data regarding blooming are given, in order to complete the phenological record of the varieties to date.

Oranges.

Variety.	First Bloom.	Full Bloom.	Ripe.	Average Crop per Tree.
Homosassa.....	Mar. 28	April 18	Mar. 1	145 lbs.
King.....	May 10	May 20	July 10	60 "
Magnum Bonum.....	Mar. 18	Mar. 28	Mar. 1	346 "
Malta Blood.....	" 20	April 5	" 1	62 "
Mediterranean Sweet.....	" 20	" 10	" 1	76 "
Parson Brown.....	April 5	" 20	" 1	110 "
Pineapple.....	Mar. 18	" 25	" 1	198 "
Ruby.....	" 5	" 18	" 1	181 "
Sour Orange.....	April 5	" 25	-----	60 "
Valencia.....	" 10	" 30	July 1	103 "
Washington, on sour stock.....	" 10	" 28	Feb. 1	81 "
Washington, on sweet stock.....	" 1	" 10	" 1	137 "

Apples.

Variety.	First Leaf.	First Bloom.	Full Bloom.	Ripe.	Average Crop per Tree.
Early Ripe.....	April 20	May 1	April 10	July 15	123 lbs.
Fameuse.....	" 15	" 5	" 5	Sept. 20	116 "
Missouri Pippin.....	May 5	June 1	May 1	Nov. 1	70 "
Rhode Island Greening.....	April 18	May 5	April 10	Sept. 10	76 "
White Winter Pearmain.....	" 16	April 28	" 5	Oct. 1	50 "
York Imperial.....	" 21	May 1	" 30	Sept. 1	89 "
Yellow Newtown Pippin.....	" 20	" 1	" 15	Oct. 1	119 "

All the apples were badly injured by the codling-moth.

Peaches.

(Listed in the order of ripening.)

Variety.	First Bloom.	Full Bloom.	First Leaf.	Ripe.	Average Crop per Tree.
Crawford's Early.....	April 1	April 14	April 12	Aug. 1	192 lbs.
Crawford's Late.....	" 1	" 10	" 8	" 1	175 "
Large Early York.....	" 2	" 12	" 2	" 1	75 "
Stump the World.....	Mar. 1	Mar. 10	Mar. 10	" 1	186 "
Blood.....	April 3	April 14	April 10	" 3	105 "
McKevitt's Cling.....	" 5	" 18	" 6	" 3	56 "
Yellow St. John.....	Mar. 5	Mar. 15	Mar. 15	" 5	80 "
Cooledge's Favorite.....	April 3	April 14	April 14	" 12	90 "
Chinese Cling.....	Mar. 25	" 8	" 10	" 18	50 "
Foster.....	April 5	" 15	" 6	" 18	70 "
Grosse Mignonne.....	" 1	" 12	" 12	" 18	60 "
Mountain Rose.....	" 1	" 12	" 18	" 18	50 "
Oldmixon Free.....	" 5	" 14	" 14	" 18	95 "
California Cling.....	" 1	" 8	" 8	" 20	187 "
Morris White.....	" 5	" 15	" 7	" 25	78 "
Lovell.....	Mar. 25	" 8	" 8	" 27	73 "
Oldmixon Cling.....	April 4	" 8	" 6	" 27	123 "
Runyon's Orange Cling.....	" 1	" 10	" 18	" 27	100 "
Seller's Cling.....	Mar. 1	" 10	" 10	" 27	125 "
Yellow Tuscany.....	" 3	" 20	" 6	" 30	87 "
Wilkins' Cling.....	" 1	" 10	" 10	" 31	67 "
Salway.....	" 2	" 10	" 10	Sept. 1	90 "
Smock's Late Free.....	" 15	" 8	" 8	" 15	100 "
Comet.....	April 1	" 12	" 2	" 20	175 "
Heath Cling.....	" 1	" 10	" 10	" 25	84 "
Henrietta (Levy's).....	" 1	" 10	" 10	" 25	75 "

The peaches produced at this station are of a very high quality, and the list of varieties producing good crops given above shows the wide range of the ripening season.

Pears.

Among the pears, no variety averaged fifty pounds of fruit per tree during 1902. The pear blight has made its appearance in the orchard, and is making rapid inroads on the trees. Practically all varieties are affected; many of the apple trees show signs of the disease, and unless some means can be found to prevent its spread, it is evident that it will prove a serious menace to the orchards of pome fruits in southern California. All of the Bartlett pears, which were the best summer pears produced at the station, have perished with the disease.

Duchesse d'Angoulême is one of the best late summer pears. It seems to resist the blight to a sufficient extent to enable it to produce good crops during most seasons. Blanquette is an excellent small, summer pear, ripening during the first week in July. It takes twenty-six of them to weigh a pound, but the quality is excellent. Lawson is also a good early pear, ripening during the first week in July. It is inferior as a table fruit, but for cooking it is very good; it will cook tender in half an hour. Cole is a very prolific variety, which is better adapted for cooking than for eating out of hand. St. André is the best fall pear. Like the apples, the pears were all severely injured by the codling-moth.

Almonds.

The almond crop at the station was good during the season. The following table shows the complete list of varieties which bore fruit, together with the average production for eight years. A glance at the table will show that the crop for 1901-2 was above the average in all cases—in some instances considerably above. In all cases the weight of shelled nuts is given. The quality of almonds produced at the station is high.

Variety.	First Bloom.	Full Bloom.	Crop per Tree.	Average annual yield for 8 years from time trees were 3 yrs. old.
Commercial	Jan. 21	Feb. 13	2 lbs.	1.25 lbs.
Drake's Seedling	Feb. 16	" 26	14 "	4.75 "
Flat Fruited (hard)	" 16	" 26	72 "	18.80 "
Golden State	" 17	Mar. 3	39 "	12.50 "
I X L	" 14	" 2	2 "	2.00 "
King's Softshell	" 15	" 1	21 "	5.75 "
Languedoc	Mar. 2	" 17	38 "	16.00 "
Lewelling's Prolific	" 3	" 18	14 "	4.12 "
Marie Dupreys	Feb. 13	Feb. 27	43 "	12.30 "
Nonpareil	" 16	" 26	22 "	4.80 "
Ne Plus Ultra	" 1	" 18	15 "	5.00 "
Paper Shell	" 15	Mar. 3	10 "	5.12 "
Pistache	Mar. 2	" 10	2 "	1.25 "
Sultana	Feb. 13	Feb. 26	13 "	5.00 "
Silver Shell	Mar. 4	Mar. 15	18 "	8.00 "

Apricots.

(Listed in the order of ripening.)

Variety.	First Bloom.	Full Bloom.	First Leaf.	Ripe.	Average Crop per Tree.
Newcastle	Feb. 28	Mar. 8	Feb. 28	June 15	60 lbs.
Early Moorpark	Mar. 15	" 28	" 15	July 7	60 "
Briggs' White	" 12	" 25	" 12	" 10	130 "
Blenheim	" 12	" 25	Mar. 18	" 12	150 "
Early Rivers	" 28	April 8	" 28	" 20	55 "
Hemskirke	" 28	" 9	" 28	" 20	100 "
Moorpark	" 28	" 12	" 25	Aug. 20	55 "

Plums.

Variety.	First Bloom.	Full Bloom.	First Leaf.	Ripe.	Average Crop per Tree.
Coe's Late Red	Mar. 28	April 6	April 1	Nov. 10	75 lbs.
Ontario	April 8	" 15	" 5	July 30	70 "

These two varieties were the only ones which yielded fifty pounds of fruit or more during 1902.

Figs.

It is impossible to obtain accurate records of the weights of the figs, as the greater part of the crop is always destroyed by the birds, and, as is well known, they always take the best fruit. From general impressions, it is found that a white fig, to which the name White Dattato has been given, is the best fig for the third period, as it might be called. It ripens in August; in some seasons about the first, but usually about the middle of the month. It bears a continuous crop from then until cut off by the frost. It is called "White Dattato" because it was received with a lot of eight (supposedly) varieties. They turned out to be all of the same variety as the one labeled White Dattato; so the names were changed. It is the best white fig at the station. Angelique is another good white fig that ripens ahead of the former and has two distinct crops. It is the best white fig in its season.

Gros Gris Bifere is the best early fig. It is always of good flavor and much ahead of the others in quality at the time of year at which it ripens. It is always good the first week in July.

Verdal Longue is the latest fig at the station. It is green in color when ripe, and hangs on the tree until January. It should be very valuable for frostless locations.

Negro Largo is the best large black fig at the station. It is very prolific and dries well.

Purple Smyrna is the sweetest black fig, and makes a fine dried fruit for family use.

Grapes.

Nearly all varieties of grapes do well at this station. Some of the favorite varieties in this section are enumerated below. The soil where the vines are planted is a very light, sandy loam, but of uniform quality to a great depth. It is found that irrigation is necessary in order to bring most of the varieties to full maturity, unless the rainfall amounts to at least 18 inches during the year.

Persian No. 26 is a promising new early variety. The berries are large and oval in shape, and are of a very light amber color, turning to a light green in the center of the moderately loose bunches. The berries are crisp and of good flavor. The variety should be valuable for planting in the early sections of Riverside and San Diego counties as a table grape.

Cinsaut is perhaps the favorite black grape, which comes in just ahead of the main crop. It shows its characteristic resistance to drought in the sandy soil of the station. It always matures a good crop unless injured by frost. It is one of the most tender varieties in this respect. Thirty degrees will kill the buds just before they open, while other varieties in the vineyard will be unharmed under the same conditions.

Muscatelio Fino is one of the best black table grapes. It did not prove prolific until it was pruned long. When pruned short, it bears very little fruit.

Blue Portuguese always produces a large crop, but requires a full allowance of water to make good-sized berries. It ripens late in July or early in August. It is one of the best early varieties.

Purple Damascus is a favorite grape with consumers and shippers in this section, but the bunches are seldom perfect. The variety is very much subject to coulure.

Torok Goher Noir is very similar to Gros Colman, except that the bunches are more perfect and the berries are larger. It is a good variety, much handsomer than Gros Colman.

Alicante Bouschet is very popular with those desiring a red-juiced grape. It is in demand for canning, and is thought by some to be a good substitute for blackberries, when that fruit is scarce, for canning purposes. It is a most prolific bearer at this station.

Black Corinth ripens late in October and is one of the best late black grapes. It is very prolific; some vines produce over 80 pounds each. The bunches are long and loose, and the berries are very tough, a good combination for a shipping grape.

Among the red grapes, Chasselas Rose is the earliest. It stands the hot sun well, none of the berries ever having been sunburned.

Flame Tokay does well during some seasons, but is sometimes sunburned. It is not very prolific, and does not make as fine bunches on the sandy station soil, as it does when planted on heavier land in the Chino Valley.

Red Emperor is a strong grower and comes into bearing early. On the very light sandy soil at the station, it does not produce heavily; farther in the valley it does better.

Among the Muscats, Bowood seems to yield better bunches, and for this reason is a little more desirable than the other varieties of Muscat. Huasco produces the sweetest grapes of this class, but the bunches are very poor.

Olivette de Cadanet is one of the best white table grapes. It matures about the middle of August, but maintains its high quality until late in the fall. In the sandy sections south of Cucamonga, it is sometimes covered during sand storms, and while thus protected the grapes keep perfectly until late in the fall.

Pizzutello di Roma is a popular variety. The long, loose bunches with slender, crescent-shaped berries are very attractive. It is of a light, clear green when ripe, and is very tender.

Chavooshee is similar to Persian No. 26, but ripens about the first of September. The bunches are much looser than the last-named variety, and the berries are decidedly oblong. It is the most prolific of the Persian grapes, of good quality, and a very desirable table fruit.

Thompson's Seedless has so far proved a failure at the station. In some small sections south of Cucamonga where the soil is very sandy, it has proven very satisfactory. Seedless Sultana has the reputation of being more productive in all of the districts having very sandy soils. In the chain of little valleys that lie between Pomona Valley and Los Angeles on the Puente branch of the Southern Pacific Railroad, Thompson's Seedless is enormously productive, owing no doubt to the heavy

character of the soil. In the San Gabriel Valley which lies to the north, Seedless Sultana is the better grape.

Verdal is particularly vigorous in the sandy soil of the station and is fairly productive. It is considered one of the best late table grapes by most of the patrons of the station.

Golden Queen stands at the head of the late white grapes as a producer. The bunches are perfect—about the size of well-grown muscats, but a little more closely packed. It ripens about the middle of October, and does not crack when rained on. It is a good keeper, and of good flavor when well ripened. It is liable to be picked before it is ripe, as its color does not indicate maturity.

Cipro Nero, a purple grape, is the best flavored of the late grapes; but it is almost invariably ruined by early rains. Every grape on the bunches will crack if rained on, and often a large portion of them crack even from heavy dews.

THE UNIVERSITY FORESTRY STATIONS.

These stations have now been under the charge of the University for ten years. During the past six years they have been maintained wholly by University funds. The appropriations for their work have been very limited, and for this reason the work accomplished has not been as extensive as could have been desired. The major part of the appropriations has been expended at Santa Monica, where an extensive collection of eucalypts, acacias, and other exotics has been maintained. At the Chico station little more has been attempted than "to keep things going."

That there is need for forestry work in California can not be doubted, and that good effective work can be done by the University is also beyond question. But the advisability of continuing the work at Chico and Santa Monica as it has been carried on during the past few years, with an allowance of funds barely sufficient to keep things going, is questionable. More money should be put into the work, and the operations of the stations should be extended beyond the narrow limits of the station tracts. The station grounds can serve only as trial grounds on the smallest scale, and for nursery purposes. The coöperation of tree-planters should be obtained. For this a definite system of coöperative tree-planting experiments should be outlined and maintained. It is not enough that we simply grow a few trees at our forestry stations, leaving the residents of the districts to interpret the results as best they may. It is as much the function of the University to correlate the results secured at the stations with actual practice, as it is its function to secure those results. In order to accomplish this the practicability of the results must be demonstrated. Forestry practices can be demonstrated only by, at least, fair-sized plantations. It is useless to rely upon measurements of, or observations made upon, single trees or even upon a few trees. Rational forestry practices can not be based upon single tree specimens, or even upon small groups of trees. Without further experiments, conducted on a scale wholly out of question on the present station grounds, the results of the work attempted at the stations fail to justify their maintenance.

That the work which it is possible to carry on at these stations can form the basis of a future policy, or can be of value in solving the problems which must be faced in the management of the existing forests of the State, is not claimed for a moment. The possibilities of the work of the stations are limited to special lines of forestry investigations, such as the introduction and trial of exotic species, adapted for special purposes—the production of special forest crops, tan bark, oak, camphor, etc., and for the production of wood crops upon lands and in localities where wood-growth is limited. The last-named work is of especial importance in southern California, where immense tracts of bare land are available for the production of wood, could suitable species be found. For this purpose some of the species of eucalypts and acacias promise to be of great value. The Santa Monica station is therefore capable of being of invaluable service to the southern end of our State. The work of this station is admirably adapted for the production of nursery-grown stock of these classes of trees for wider planting.

THE SANTA MONICA FORESTRY STATION.

No change has been made in the personnel of the management of this station during the past year. Mr. Roy Jones of Santa Monica continues to act as patron of the station; Mr. Wm. Shutt remains as its foreman. The shortness of funds makes the foremanship of this station a peculiarly difficult one, as the labor payrolls have to be kept down to the lowest possible limit. The general upward tendency in the daily wages offered laborers comes with especial severity at this station, because it is impossible to pay the high wages which capable men receive elsewhere. For that reason we have been compelled to put up with "the cheap hands," who are the most expensive in the end. It is hoped that some more satisfactory arrangement can be made in the future, so that the University will be able to offer sufficient inducements to secure the services of capable men.

Notwithstanding the shortness of funds and the difficulty in securing capable laborers above referred to, the amount of work accomplished at this station during the past year was very satisfactory, and reflects great credit upon the untiring and painstaking efforts of the foreman. The steep hillside, extending from the middle or home mesa to the upper mesa, was entirely cleared of brush and planted with trees. The clearing of this hillside adds about five acres to the available land of the station. A portion of the hillside was set with *Eucalyptus polyanthemos*, *E. corynocalyx*, and *E. viminalis*. The trees were set about four feet apart each way, and an almost full stand has been secured. A large portion of the hillside was planted with the seeds of *Acacia pycnantha* (Golden wattle), *Prunus ilicifolia integrifolia* (Catalina cherry), and *Pinus austriaca*. The results of this seed planting have not been very satisfactory. Only a few of the pines and acacias came up. The Catalina cherry was more satisfactory, a fairly good stand (about 70 per cent) being secured. Further attempts to secure a stand of trees by direct seed sowing should and will be made next season. The failure of *Acacia pycnantha* to yield a good stand was unlooked for, because it volunteers freely under the old trees on the middle mesa.

A special effort was made to plant as many blocks of the most promising varieties of eucalypts as possible upon the vacant ground of the upper mesa. This plantation was designed as a special test of these species for forest planting. The limited amount of available land at the station rendered it impossible to plant larger blocks than one half acre of each variety. While these can not be considered of sufficient extent to give full representative forest conditions, they are at least large enough to indicate the behavior of the species under close planting. These blocks will also serve as a basis of systematic measurements of the rates of growth of the trees, as well as of the quantity of wood produced per acre. The measurements secured from these groups will, at any rate, be more accurate and therefore of more value than those heretofore made of single trees.

As there was, and still is, some difference of opinion among authorities regarding the proper distance apart to plant eucalyptus trees, half of each block was set 6 by 6 feet, and half 4 by 4 feet apart.

One-half acre blocks of each of the following species were planted: *E. globulus*, *E. corynocalyx*, *E. viminalis*, *E. rostrata*, *E. diversicolor*,

E. resinifera, and *E. punctata*. Quarter-acre blocks of *E. polyanthemus* and *E. stuartiana* were also planted; thus making, in all, four acres, or a total of 7,864 trees. The plants were all set directly from the seed flats, and none at the time of transplanting were over 10 inches high. Planting was begun in November, as soon as sufficient rain had fallen to moisten the soil. Unfortunately, nearly every shower of rain is followed in this district by very heavy north winds. The occurrence of these winds was unusually frequent during the season of 1902-3, and were thus especially distressing to the newly-planted trees. Notwithstanding these unfavorable conditions the greatest loss sustained was in the case of *E. viminalis*, of which about 15 per cent failed to grow. The lowest loss was with *E. globulus*, of which 4 per cent were lost. A few of the blocks were set in February and March. At this season about 25 per cent of the trees failed to survive the shock of transplanting. In addition, the fall-planted blocks are now very much farther advanced than the early-spring-planted. These results seem to indicate fall planting to be the best for coast regions, where the winter temperatures do not fall below the freezing point.

The young trees set upon the upper mesa and upon the hillside were all home-grown, and were all from seed procured from older trees upon the station grounds. The seeds were planted in shallow flats in a mixture of leaf mold and sandy earth. The flats had to be protected by lath screens until the young plants were several inches high, on account of the depredations of birds. With only one exception, the young seedlings grew vigorously, and within four months from the date of seed sowing, the plants were large enough to set out. They averaged from 5 to 10 inches high. The exception referred to was *E. rostrata*. The young plants mildewed badly in the seed flat, and despite sulfuring and spraying with Bordeaux mixture, they suffered severely. After they were 5 or 6 inches high, however, the plants seemed more resistant to the fungous attacks.

Distribution of Trees.—In addition to the trees set out in the upper mesa of the station, over 10,000 trees were distributed to tree-planters. In making this distribution, care was taken to have the plants reach the recipients in good condition, and in no case were any trees given to an applicant without first procuring a promise from him that he would give the trees proper care, and that he would report the results of his trials. The list following shows to whom trees were sent, the number and kinds sent, and is presented here as a matter of record:

Patterson Ranch Co., Oxnard—		
Albizia lophantha	1,000	
Eucalyptus viminalis	1,000	
E. robusta	400	
Cupressus macrocarpa	250	
		2,650
Mrs. H. Colmore, Coarse Gold—		
Eucalyptus viminalis	50	
E. rostrata	100	
E. polyanthemus	100	
E. punctata	100	
		350
A. T. & S. F. R. R., Stockton—		
E. viminalis	150	
E. polyanthemus	100	
E. robusta	125	
E. rudis	35	
E. cornuta	50	
		460

R. W. Widney, Pacoima—		
E. viminalis	200	
E. rostrata	200	
E. punctata	200	
Southern California Experiment Station, Ontario—		600
E. globulus	2,000	
E. viminalis	1,000	
E. rostrata	650	
E. polyanthemus	306	
E. punctata	100	
Chico Forestry Station, Chico—		4,050
E. viminalis	350	
Miscellaneous distribution	2,000	
Grand total		10,460

CLIMATE.

The appended table of meteorological data for the eighteen months ending June 30, 1903, shows that the reputation of Santa Monica climate for equableness has been sustained during the past two seasons. It must not be forgotten, however, that the records given were obtained on the middle mesa. On the lower mesa the temperature ranges are greater. Many tender exotics which live through the winter on the middle mesa can not withstand the winter frosts which occur on the lower levels of the station grounds. It is supposed that the climate of the upper mesa is even milder than that of the middle. It may be said, therefore, that there are three different climatic conditions represented on the station grounds. Comparative climatic records from the three levels would be exceedingly interesting. An attempt will be made in the future to obtain the necessary instruments for taking these records.

A glance at the table will show that the Santa Monica district shared in the bountiful and well-distributed rainfall which southern California obtained during the past season. The total recorded at the station was 18.76 inches for the season—very nearly 9 inches above the average for the past ten years. The maximum temperature recorded during the past eighteen months was 80°, which was registered on August 1, 1902, and on January 4 and 6, 1903. Only once did the thermometer record a freezing temperature, viz., during February, 1903.

METEOROLOGICAL RECORD AT SANTA MONICA FORESTRY STATION—JANUARY 1, 1902, TO JUNE 30, 1903.

MONTH.	Mean Monthly Maximum.....	Mean Monthly Minimum.....	Mean Monthly Range.....	Extreme Maximum with Dates.....	Extreme Minimum with Dates.....	Number of Days 90° or Over.....	Number of Days 32° or Below.....	Rainfall During Month.....	Number of Days when Rain Fell.....	Number of Cloudy Days.....	Number of Partly Cloudy Days.....	Number of Clear Days.....
1902—January.....	62.19°	42.26°	19.93°	82°—4th	33°—30th, 31st	0	0	1.10	3	2	13	16
February.....	59.17	42.28	16.89	69—18th, 19th	35—1st	0	9	3.92	4	4	19	5
March.....	63.19	42.23	20.96	73—12th	35—25th	0	0	3.27	7	4	14	13
April.....	61.86	46.60	15.26	67—13th, 14th	40—9th	0	0	0.13	1	4	13	13
May.....	64.70	47.87	16.83	71—6th	44—2d, 4th, 21st, 22d, 23d	0	0	0.00	0	3	14	14
June.....	67.00	52.00	15.00	76—23d, 24th	44—8th, 15th	0	0	0.00	0	0	20	10
July.....	69.26	56.12	13.12	79—15th	65—7th, 10th	0	0	0.00	0	2	27	2
August.....	70.38	55.45	14.80	80—1st	49—26th, 28th, 29th	0	0	0.00	0	0	20	11
September.....	71.13	56.26	14.86	76—26th	50—22d	0	0	0.00	0	0	27	3
October.....	66.41	50.35	15.74	71—12th	61—16th, 18th	0	0	0.00	0	5	17	9
November.....	65.06	46.70	17.80	77—2d	40—29th	0	0	3.12	3	3	9	18
December.....	62.74	44.61	17.87	73—8th	39—15th	0	0	2.97	5	5	9	17
1903—January.....	64.48	45.32	19.16	80—4th, 6th	36—30th	0	0	1.14	4	6	15	10
February.....	58.82	39.82	19.28	69—21st, 26th	32—3d	0	1	2.12	3	0	12	16
March.....	61.19	43.96	17.22	70—21st	35—17th	0	0	6.55	7	11	12	8
April.....	62.33	47.00	15.30	72—3d	41—12th	0	0	2.84	3	10	17	3
May.....	64.00	50.45	13.87	69—17th	41—22d	0	0	0.02	1	13	16	2
June.....	68.83	54.80	13.46	75—5th	48—4th, 15th	0	0	0.00	0	4	24	2

THE CHICO FORESTRY STATION.

The management of this station has remained as it was found at the time the writer took charge, July 1, 1902. Mr. T. L. Bohlender continues in charge of the work in accordance with the arrangements made with Inspector Shinn. Mr. C. V. Richards continues to act as patron.

The work of the station during the past year has not been extensive. The small appropriation available for this station is barely sufficient to keep the place in order. The presence of a full foreman, who will be able to give his entire time to the work of the station, is most urgently needed. While Mr. Bohlender is doing all he possibly can, under the circumstances, he can not devote the attention to detail so urgently needed to make the work of the station effective. The Regents have granted a special appropriation for converting the present station barn building into a foreman's cottage. The plans for this work are now being drawn, and it is hoped that before the close of the summer a workman-in-charge will be on the ground.

The plan mooted by Mr. Shinn in his last report, viz., the conversion of the station into a farm station, does not meet with universal approval in the Chico district. Among the chief objectors to this plan is Mrs. Bidwell, widow of General John Bidwell, who donated the land to the State for a forestry experiment station. It is Mrs. Bidwell's earnest wish that the station be continued strictly on forestry lines.

In addition to keeping the grounds in order, the major part of the work at Chico during the past year has consisted in setting out plantations of tanbark oak (*Quercus densiflora*) and cork oak (*Quercus suber*) acorns. It was planned to set out about four acres of each, in order to place the plantations at least without the pale of uncertainty. Some difficulty was experienced in securing the necessary acorns, especially of the tanbark oak. They were finally obtained, partly from Marin County through the courtesy of the Mount Tamalpais Land and Water Company, and partly from Santa Cruz County through the painstaking efforts of Miss K. Adams of Wrights. The cork oak acorns were obtained from Vilmorin, Andrieux & Co., of Paris, through the Section of Seed and Plant Introduction and Distribution, of the U. S. Department of Agriculture. We are especially indebted to the Division for the importation of the seed free of cost to the station.

The tanbark oak acorns were received early enough to allow them to be placed in a sprouting bed before they were planted in the field. They were placed in coarse gravel in November, and at planting time, March, they had nearly all sprouted. The ground was plowed twice, and thoroughly harrowed and cultivated before the acorns were planted. Rows were run and opened four feet apart by means of an ordinary corn-marker. The acorns were planted in these furrows about two feet apart. They were planted thus closely in order to insure a good stand. In all, $1\frac{1}{2}$ acres were planted.

The same method was pursued in planting the cork oak acorns. There was not time to sprout them, as they were received from France as late as March 10th. Despite the long trip, the acorns arrived in fairly good condition. They were packed in charcoal. Very few were decayed, but a number of them were bruised or injured. The bruised nuts invariably decayed when planted. In all, about $3\frac{1}{2}$ acres were planted with cork oak acorns.

The weather was exceedingly unfavorable for the germination of the acorns and the growth of the young oaks. Only one shower of rain fell after the acorns were planted, and that proved more detrimental than beneficial by causing the surface of the ground to become crusted. The crust was broken with a light rake in order to allow the young seedlings to come through. In the case of the tanbark oaks fully 50 per cent germinated, came up, and grew to be 2 inches high; but the weather was afterward so unfavorable (no rain and hot dry winds) that most of the young seedlings perished. The stand of cork oaks was poorer; only about 20 per cent of the acorns germinated, most of which are still alive. That the failure was not wholly due to the unfavorable climatic conditions is proved by the fact that a portion of the acorns which were planted in the nursery at the Central Station did not give much better results. About 30 per cent of these acorns germinated and came up. They were irrigated twice.

The results of these plantings show plainly that it is difficult to establish a plantation of oaks by seeding in the open ground, without some means of mulching the surface, unless the season is exceptionally favorable. As is well known, acorns germinate and grow freely in the forest under the leaves and forest litter, and it would seem that these conditions should be imitated in the field in order to secure the best results. Arrangements have already been made to obtain a further supply of both tanbark oak and cork oak acorns for trial next season. Transplanting the young trees from the nursery will also be tried.

A comparison of the value of year-old eucalyptus seedlings for transplanting, as against those four months old, was made at this station. The year-old seedlings ranged from 4 to 6 feet high; the four-months-old seedlings ranged from 6 to 10 inches high. The older seedlings were raised at Chico, while the smaller ones were shipped from the Santa Monica station. Practically every one of the larger trees died; about 80 per cent of the smaller ones survived and are now growing. These results, which confirm the experiences had by individual tree-planters in other sections of the State, need no further comment.

SUMMARY OF BULLETINS ISSUED.

DECIDUOUS FRUITS AT AND NEAR PASO ROBLES.

(Bulletin No. 141.)

The purpose of this bulletin is to give an account of experiments conducted by the Station during a period of thirteen years to ascertain the possibilities of deciduous fruit culture upon the substation tract east of the Salinas River, near the town of Paso Robles, and upon similar soils in that and other districts of the southern Coast Range. An analysis of the soil is given and the history, with photographs, of the growth made by different varieties of trees, and the conclusion drawn that the climate forbids the successful culture of most deciduous fruits at the substation, there being too little rainfall for the shallow soil above the hardpan which underlies the region.

CULTURE WORK AT THE SUBSTATIONS, 1899-1901.

(Bulletin No. 147.)

This bulletin covers 129 pages and is well illustrated. It was issued June, 1902, and is a review of the work of experimentation at the various substations in the State. At the Foothill Station in Amador County, the Southern Coast Range Station, and San Joaquin Valley Station, special attention was given to orchard fruits, to the vineyard, and to seeds sent from the United States Department of Agriculture. At the Southern California Station in addition to the foregoing subjects, the matter of irrigation, absorption and penetration of water, etc., were investigated, and diagrams and tables resulting from these investigations are given.

The Santa Monica and Chico Forestry Stations are represented by reports of the growth of various forest trees under cultivation during the time covered by the report.

DONATIONS MADE TO THE EXPERIMENT STATION FOR THE YEARS 1901-2 AND 1902-3.

Gifts of seeds, plants, and scions have been received from the following persons, firms, and institutions:

F. Albert, Santiago, Chile.
F. T. Bioletti, Agr. College, Elsenberg, Cape Town, Africa.
M. H. Canady, West Berkeley, Cal.
E. Duwisin, Berwyn, Pa.
H. H. Gird, Bonsall, San Diego County, Cal.
A. Godefrey-Lebeuf, Paris, France.
Iowa Seed Co., Des Moines, Ia.
Ezra Parker, Peoria, Ill.
Elmer Stearns, Los Angeles, Cal.
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Miss Alice Crane, 2316 Clay St., San Francisco.
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H. H. Meyers, Sacramento, Cal.
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H. P. Chandler, Redwood Creek, Cal.
Arthur King, Berkeley, Cal.
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J. Burt Davy, Berkeley, Cal.
Cav. C. Sprenger, Napoli-Vomera, Italy.
Henry Melde, Eureka, Cal.
A. C. Bryant, Calistoga, Cal.
J. P. Tracy, Eureka, Cal.
Jardin Botanique, Geneva, Switzerland.
Royal Botanic Gardens, Sipur, India.
Mr. Goethe, Stockdale Ranch, Bakersfield, Cal.
Wyoming Agr. Expt. Station, Laramie, Wy.
R. W. Adlam, Johannesburg, South Africa.
Miss Bolton, Paso Robles, Cal.
Mrs. Manning, Hoopa, Humboldt County, Cal.
Wm. Robert Guilfoyle, Dir. Botanic Garden, Melbourne, Australia.
Charles W. Livermore, Pasadena, Cal.
W. Wolters, Lompoc, Cal.
Charles Abraham, San Francisco.
California Nursery Co., Niles, Cal.
Hubert Dyer, 121 California St., San Francisco.
W. G. Thompson, Redwood City, Cal.
E. B. Babcock, Mount Dana, Cal.
Prof. W. A. Setchell, Sisson, Cal.
Mrs. Kellogg, Berkeley, Cal.
J. H. Maiden, Botanic Garden, Sydney, N. S. W.
J. W. Barwell, Waukegan, Ill.
W. A. Silliman, Watsonville, Cal.
P. Van der Linden, Santa Rosa, Cal.

Dr. Marsden Manson, San Francisco.
 L. L. Lewis, El Verano, Cal.
 Know Nurseries, Vincennes, Ind.
 Hon. Thomas R. Bard, Hueneme, Cal.
 J. W. Griesimer, Hopedale, Ill.
 Prof. L. H. Bailey, Ithaca, N. Y.
 Mrs. A. J. Thompson, 2031 Eagle Ave., Alameda, Cal.
 Carleton Ball, Washington, D. C.
 Mr. Sawyer, Maldes, Mass.
 Fernando P. Leme, Minas-Geraes, Brazil, South America.

THE LIBRARY AND READING-ROOM OF THE CENTRAL EXPERIMENT STATION.

NEWSPAPERS, MAGAZINES, AND PERIODICALS RECEIVED, JULY, 1902.

CALIFORNIA.

Berkeley Daily Gazette, Berkeley, Alameda County.
 Oakland Enquirer, Oakland, Alameda County.
 Amador Dispatch, Jackson, Amador County.
 Oroville Register, Oroville, Butte County.
 Chico Enterprise, Chico, Butte County.
 Colusa Sun, Colusa, Colusa County.
 Fresno Weekly Republican, Fresno, Fresno County.
 Willows Journal, Willows, Glenn County.
 Inyo Register, Bishop, Inyo County.
 Inyo Independent, Independence, Inyo County.
 Lake County Bee, Lakeport, Lake County.
 California Cultivator, Los Angeles, Los Angeles County.
 California Fruit-Grower, Los Angeles, Los Angeles County.
 Fruit World, Los Angeles, Los Angeles County.
 Rural Californian, Los Angeles, Los Angeles County.
 L'Union Nouvelle, Los Angeles, Los Angeles County.
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INDEX.

A

	PAGE.
Aaron, C. T., Marysville, soils from.....	36
Abbott, J. F., Indio, soils from.....	35
Abbott, Mrs. E. A., Los Angeles, plants from.....	137
Abele.....	130
Abraham, C. C., San Francisco, plants from.....	134, 202
Abrams, George D., Imperial, soils from.....	36, 54
Acacias, at forestry stations.....	196
distributed, and trials of.....	143
for streets.....	129
Acorns, analyses of.....	85, 86
Adams, J. Q., Soldiers' Home, plants from.....	137
Adams, Miss K., Wrights, acorns from.....	200
Adams, Miss S. L., Point Loma, plants from.....	135
Adlam, R. W., South Africa, donation from.....	202
Adrian, E. N., Napa, blood meal from.....	84
African stock-melon, described, and trials of.....	149
Ague-weed, described.....	130
Ajonjoli meal, analysis of.....	84, 85
Alameda County, report of central station.....	142
plant trials in.....	146-152
soils and vines from.....	27, 28, 33, 112
waters from.....	74, 76, 77, 79
Alameda Creek, analyses of soils of.....	27, 28
Albert, F., Santiago, Chili, donation from.....	202
Albertz, F., Cloverdale, soils from.....	36
Albrecht, Frederic, Estrella, plants from.....	146
Alderman, W. J., Grass Valley, plants from.....	137
Aleurites cordata, described.....	135
Alexander, Mrs. G. W., Moorpark, plants from.....	134
Alfalfa on alkali land.....	46, 49
Alfileria on alkali land.....	48
Alkali, at Tulare substation.....	40-44, 179
commercial analyses of.....	92
distribution of, in soil columns.....	40-44
drainage remedy.....	65
in soils of Chino substation.....	44
lands, publications regarding.....	38
lands, reclamation of, rules for.....	39, 40
lands of Fall River Valley.....	25
method of analysis.....	40
of Surprise Valley.....	23
soils, analyses of (see table of contents).....	13, 39-56
soils, samples received.....	39
tolerance of, by alfalfa.....	46, 49
tolerance of, by mesquit trees, melons, sorghum.....	46
variability in composition in adjacent soils.....	42
washed into drain waters.....	82

	PAGE.
Alkali-slender grass, described.....	130
Almond kernels for pastes, analyses of.....	86
Almonds, statistics of.....	169, 191
reports on culture tests.....	169, 191
Alpine, altitude of.....	145
Aluminum and tin, solubility in lemon juice.....	91
Amador County, report of substation in.....	162
waters from.....	68
American and cork elms for streets.....	129
Anaheim disease in the State.....	111
Analysis of alkali, method.....	40
of alkali soils.....	39
of almond pastes.....	96
of blue-flowered nightshade.....	137
of breakfast foods.....	86
of brine from pickled olives.....	92
of commercial alkalies or lyes.....	92
of drain waters.....	folder, 82
of foods and feeding-stuffs.....	83
of fruits, etc.....	90
of grain damaged by water.....	94
of jajoba.....	145
of Santa Clara River delta soil, Ventura County.....	29, 30
of seeds of Polygala apopetala.....	102
of toasted bread.....	100
of waters.....	66-81
Analyses of soils, chemical and mechanical.....	27-33
from Coachella, Riverside County.....	29, 30
from Fall River Valley.....	26
from Hoopa Valley.....	26
from Indio, Riverside County.....	29, 30
from Linda Vista, San Diego County.....	29, 30
from Orland, Glenn County.....	29, 30
from Osage, Contra Costa County.....	26
from Round Valley, Modoc County.....	24
from Round Valley, Mendocino Co.....	26
from Santa Ynez Valley.....	30
from Surprise Valley.....	26
from Upper Lake, Lake County.....	26
Anderson, G. A., Hynes, alkali soil from.....	35, 48
Anderson, Dr. C. E., Alhambra, water from.....	75
Anderson, J. W., San Dimas, soils from.....	35
Anderson, Leroy, review of work in animal industry.....	16, 119
Anderson, L., San Luis Obispo, plants from.....	138
Androus, S. N., Pomona, patron of experiment station.....	186
Angophora intermedia.....	130
Angwin, E., Angwins, red soils from.....	35
Animal industry, review of work in.....	16, 119
Anthyllis vulneraria, trials with.....	154
Apples, report on variety tests.....	168, 181, 190
Appropriations by the Legislature.....	7, 10, 11
for Farmers' Institutes.....	18, 19
for forestry stations.....	195
Apricot pit kernels for pastes, analyses of.....	96

	PAGE.		PAGE.
Apricots, reports on culture tests	169, 182, 191	Big or Round Valley, Modoc County	24-33
sugar in	98	Bioletti, F. T., Cape Town, donation	202
Aram, W. F., Redding, plants from	138	from	86
Araucarias for lawns and yards	129, 146	Bird's-foot clover, analysis of	138
Argan-tree, described	135	Bishop, R. K., Orange, plants from	76
Arizona ash, described	145	Bishop, T. B., Stockton, water from	75
Armistead, Dr. H. V., Newman, plants		from	130
from	143	Bitter-root, described	148, 149
Armstrong, G. J., Petaluma	17	Bitter vetch for green-manure	80
Arrow-weed	136	Bixby, J., Temescal, waters from	150
Arroyo Grande Valley, analysis of soil		Blake, F. A., Valle Vista, plant trials by	
of	33	Blanchenburg, E., San Francisco, vine	
Arsenical insecticides, summary of bul-		roots from	112
letin	109	Blewett, C. F., Livingston, potatoes	
Artesian wells, waters of	78, 79	from	98
Asmus, T. C., San Miguel, plant trials		Bliss, W. W., Duarte, water from	75
by	151	Blood, D. H., Bakersfield, soil from	34
Asparagus-growers, coöperation with ..	11	Blood meal, analysis of	84, 85
Asparagus rust	11	Bloody murrain or Texas fever	115
Astralgus, trials with varieties	158	Bloom, S. M., Riverside, limestone from	37
Atriplex, trials with varieties	160, 164, 174	Blowers, C. M., Hanford, waters from ..	73
Austin, F., Escondido, strychnine from	99	Blue dawn flower	128
Australian saltbush on non-alkaline		Blue-flowered nightshade, described ..	137
soil	174	Blue gum, described	136
Australian water-grass	177	Blue vetch, trial of	147
B			
Babcock, E. B., Mount Dana, donations		Bockennoogen, C. F., Thermal, gypseous	
from	202	sand from	36
Babcock, G., Saratoga, soils from	35	Bodfish, G. F., Malaga, vine roots from	112
Baber, E. J., Fresno, cuttings from	112	Boedefeld, J., Colusa, water from	73
Bacteriology, review of work in	17, 114	Bohlender, T. L., foreman at Chico	
Bailey, J. W., Oakley, soils from	34	station	200
Bailey, Prof. L. H., New York, dona-		Bolton, A., Arizona, donation from	202
tion from	203	Bolton, Miss E., La Honda, plants	
Bairstow, J. W., Hanford, apricots from	98	from	135, 138, 202
Baldridge, M., Bloomington, soils from	35	Bonduc or nicker-nut, described	130
Ball, C., Washington, D. C., donation		Bonner, W. G., Eureka, plants from	135
from	203	Book, W. A., Oakland, water from	76
Ball, W. J., Auburn, plants from	36, 138	Borden, F. M., Riverside, soils from	35
Bancroft, B. H., Walnut Creek, soils		Borland, A., Fresno, soils from	34
from	34	Botany, economic, report on	16, 127
Barber, J. H., foreman of substation ..	68, 136, 143, 162	Bougainvilleas, climbing vines	128
Barbour, A., Newman, waters from	76	Bowron, B., analyses of soils by	29, 33
Bard, Hon. T. R., Hueneme, donation		Box-elder for streets	129
from	203	Boyes, A. C., Sonoma, plant trials	
Barker, J. L., Paso Robles, water from	69	by	145, 146
Barley, damaged by water, analysis of	94	Brachychiton for yards and parks	130
tests with	166	Bradley, F. W., San Diego, water and	
Barton Estate Co., Fresno, grape juice		plants from	75, 133
from	98	Brand, G. V. D., Pomona, breads from	98
Baruch, J., Los Angeles, water from	76	Brandies, alcohol in	98
Barwell, J. W., Illinois, donation from	202	Brandt, R., Fishrock, plants from	138
Basham, W. E., analyses of soil by	27, 33	Brandy Creek, analysis of water of	68
Bateman, D. F., San José, soil from	35	Brankonm, George, Corning, plants	
Bateman, D. T., Lompoc, water from	76	from	138
Baxter, C. M., Redlands, soils from	35	Brazilian pepper-tree, trial of	146
Beal, C. N., Kern, water from	69	Bread, increase of soluble matter by	
Beard, Hon. J. L., Centerville, soils from	27	toasting	100
Bearwald, Mrs. Adaline, Kingsburg, soil		Breakfast foods, analyses of	86
from	34	Brennan, Rev. William, Middletown,	
Beersam, test-plot cultures of	188	water from	71
Beller, A., San Diego, water from	75	Brewer, W. P. A., San Mateo, meal from	84
Bellota, trial of	146	Briggs, N. C., Hollister, soils from	35
Benton, A. F., San Miguel, water from ..	68, 75	Brine from pickled olives, analyses of ..	92
Bercovich, L., Oakland, water from	76	Brink, J. W., Colton, soils from	35
Berier, F. E., San Francisco, tomatoes ..	112	Briscol Creek, analysis of water of	68
Bermuda-grass, described	131	Bristly ox-tongue	137
Bewarder, Henry, San Francisco, plants		Broad bean, trials with	154
from	135-143	Brodie, H. D., Oceanside, water from	80
Bianchi, E., San Francisco, vine roots		Brome-grass described, and trials of ..	134, 150
from	112	Bronchitis, verminous, treatment of ..	117
Bignonia vetusta	128	Bronco-grass, described	130
		Broomcorn millets, trial of	151
		Brown, C., Porterville, plants from	135
		Bruns, Miss E. B., Sausalito, soil from ..	35

	PAGE.		PAGE.
Brubaker, Mrs. B. H., Corning, plants from	138	Chase, E. M., Rio Vista, water from	77
Bryant, A. C., Calistoga, plants from	130, 202	Cheat	131
Bryan, F. H., Fullerton, water from	76	Cheeseborough, C. E., Watsonville, soils from	35
Buckingham, Mrs. E. R., Vacaville, waters from	81	Cheese factories, instruction at	119
Buckley, C. A., Livermore, water from	74	Cheese-making, remarks on	120
Buildings, inadequacy of, for work	11	Chemical work of the station, and reports on	12, 23
Bulletins, edition of published	9, 18	Chemical composition of California soils	folder, 33
summary of contents	89, 108, 113, 201	Chenopodium quinoa, trial with	160
Bunnell, Mrs. G. W., Oakland, water from	74	Cherries, report on culture tests	170
Bunney, W. T., Independence, plants from	135	Chesnut, V. K., Washington, D. C.	136, 138
Burbank, L., Santa Rosa, prunes from	90	Chickling vetch for green-manure	148
Bur-clover, described	130	Chick pea, described and test-plot cultures of	136, 189
on alkali land	48	Chico Forestry Station, report on	200
Burdick, A. W., Fresno, soils from	34	Chilian soap-tree, description and reports on trial	144
Burgess, R. A., Concord, soils from	34	Chittenden, F. M., Fresno, soil from	34
Burlingame, W. F., National City, water from	77	Choate, W. A., Los Angeles, tomatoes from	112
Burning-bush	136	Cicer arietinum, trials with	154, 164, 165
Burns, H. A., Oakland, water from	74	Cieba, described	131
Bush, A. H., Decoto, water from	74	Cilley, B., Covina, plants from	138
Bush, C. W., Woodland, vine leaf from	113	Circulars issued	18
Butler, O., Berkeley, plants from	138	Citrus fruits, analyses of	14
Butte County, tests of plants in	143, 144, 145, 148, 149, 151	Clarke, W. T., Berkeley	15, 29, 108, 138
Butter-fat tests of thoroughbred cows	119	Cleavers	131
Butter, weedy flavors in, removal of	121	Clerk of the Director, qualifications of	10
Byram, O. B., Westminster, plants from	135	Cleveland, Miss V., Bay Island Farm, water from	79
C		Cliff, C. E., success of summer-fallow system	175
Caire, A. J., Santa Cruz Island, soils from	35	Climate of Berkeley	161
Cadwallader, S., Fall River Mills	24	of substations	162, 175, 179, 186, 198
Calaveras County, water from	70	Climbing vines for southern California and northern Mexico	128
California hair-grass	131	Close, Mrs. A. J., Pomona, plant trials by	152
California pepper-tree for streets	129	Clot-bur	132, 133
Calves, scours in, remarks on	117	Clover, bird's-foot, analysis of	86
Cameron, P. A., Oakland, water from	74	Coachella, analysis of soil of	29, 30
Camphor-tree for streets	129	Coachella Water Co., water from	75, 79
Campbell, Dr. M. B., Patton, waters from	80	Coates, L., Napa, prunes from	90, 91
Campbell, James, Sonoma, plants from	135	Cocanut oil-cake meal, analysis of	85
Candle-nut trees	135	Codling-moth	190, 191
Canady, M. H., Berkeley, donation from	202	Cody, M., Cornwall, plants from	134
Canfield, W. W., San Juan, plant trials by	148	Colby, George E., analyses by	14, 15, 29, 33, 68, 90, 100, 102, 107
Canghreen, Maynerd L., Alaska, plants from	135	bulletin on arsenical insecticides	109
Canutillo	131	Cole, C. W., Santa Ana, gypsum from	37
Cape gooseberry, trial of	152	Coleman, G. A., Palo Alto, soils from	35
Cape honeysuckle	128	Coleman, H., Valley Spring, water from	70
Carbon bisulfid, use of, for peach-tree borer	105	Collins, F. W., Ontario, plant trials by	150
Carrington, M. B., Selma, soils from	34	Colmore, Mrs. H., Coarse Gold, trees received by	197
Carter, H. K., Davisville, soils from	36	Colusa County, waters from	68, 71, 73, 77
Cartmill, W. B., Porterville, soils from	36	Concentrated lye, analyses of	92
clover from	86	Connelly, F. F., Bishop, minerals from	37
Catalina cherry at forestry station	196	Constantinople acacia, description and reports of trial of	143
Central Experiment Station, reports from	141	Contra Costa County, plant trials in	143, 144, 145, 146, 147, 148
Cereals, oats, rye, wheats, millets, trials of	150, 151	soils from	26, 28
Chamberlain, W. G., Cazadero, water from	71	waters from	68, 69, 74, 76
Chandler, H. P., Redwood Creek, seeds from	202	Cook, A. J., Claremont, Institute conductor	21
Chandler, M. K., Dundee, soils from	35	Cook, C. L., analyses by	33
Chappell, J. J., San Francisco, plants from	130, 133	Cook, C. S., Winchester, water from	76
Chase Nursery Co., water from	68	Cook, E. E., Tustin, soils from	35, 135
		Cook, Mary E., Chula Vista, water from	77
		Cook, E. W., Kelseyville, soil from	34
		Cooley, A., Marysville, plants from	138
		Coomes, D. A. M., Cloverdale, soil from	36

	PAGE.		PAGE.
Coöperation of farmers in work of station	15, 107	Deciduous fruits, summary of bulletin on	201
Cooper, Ellwood, Santa Barbara, water and olive oil from	71, 99	Decker, F. J., San José, water from	74
Cooper, N. O., Los Angeles, serpentine from	37	Dedual, A. G., Pasadena, vine leaves from	112
Cork oak at Chico station	200	Delgado, J. F., San Diego, rocks from	37
Corn-cockle, described	31	Department of Agriculture, U. S., bulletin of	57
Corn-spurry, described	136	coöperation with	111
Cottonseed meal, analysis of	84, 85	seeds and plants from	148, 149, 151, 152, 153, 182, 200
Coulter, S. P., Santa Rosa, grapes from	113	Desert, jajoba for	146
Coupes, G. R., Lodi, plant trials by	148	Devine, D. W., Patton, soils from	35
Cowan, W. C., Pacific Grove, plant trials by	144	Dickson, C. A., Escondido, soil from	36
Cow-pea, trials of	157	Dickson, F. W., San Geronimo, meal from	84
Crab-grass, described	136	Diseases of animals, study of	115
Craig, S. B., Fair Oaks, soil from	35	of poultry, study of	117
Crane, Miss Alice, San Francisco, seeds from	202	Distillate sprays, investigations regarding	107, 110
Creameries, instruction at	119	Distribution of seeds, etc.	141
Creon, C., Cloverdale, water from	70	Dixon, W. G., Independence, soil from	34
Crigler, Will, Cazadero, plants from	135	Dobbins, H. T., Orland, soil from	34
Croll, W., Quicksilver, plant trials by	144	Dobbins, J. H., Colfax, plant trials by	145, 147
Cron, W., Oakland, water from	74	Dodder, eradication of	136
Crops, effect of high water-table upon of Fall River Valley	57, 24	Dolichos, trial of varieties	158
Cross, Harry, Barnes, soils from	36, 55	Dollenmayer, Mr., Hanford, soils from	34
Crum, G. L., Rio Vista, soil from	35	Donations made to the experiment station	202
Cryptomeria, trial of	146	Dopkins, H. H., Dunnigan, soils from	36
Cryptomeria japonica for yards and parks	129	Dore, John, Fresno, soils from	34, 54
Culbertson, H., El Cajon, lemon juice from	91	Dornin, G. W., Oakland, waters from	77
Curl, Dr. S. M., New Zealand, Edwardsia introduced by	144	Dornback, Miss Helen, San Leandro, plant trials by	146
Currey, R. J., Dixon, plants from	138	Dosage, fumigation, summary of bulletin on	109
Curtis, William, Oak Park, soils from	35	Doyle, J. T., Cupertino, cuttings and vines from	98, 112
Cuttle, F., Riverside, water from	79	Dracenas for streets	129
Cutts, J. O., Riverside, soils from	35	Drahts, Rev. A., San Quentin, plants from	135
Cytisus canariensis	131	Drainage beneficial to lands with alkali and high water-table	58, 64, 82
D		of Fresno district, plans and estimates for	57
Dairy farm, need for	16	Drain waters from southern California, analyses of	82
Dairy school, appropriation for and work of	11, 120	Drummond, K. E., Los Angeles, honey from	99
Daly, J. E., Glendora, rock from	37	Drury, J. S., Bakersfield, soils from	34, 37
Daniels, H., Temescal, waters from	80	Duncan, K. R., Kings River, water from	68
Danner, J. D., Willows, plants from	135	Dunning, W. F., Athlone, soils from	35
Darnel, described, and poisonous nature of	131, 133	Dunning, W. R., San Francisco, plants from	138, 139
Daveggio, C., Mulberry, water from	70	Durfee, J. E., San Diego, water from	75
David Hardy Seed Co., Dallas, Tex., plants from	134	Durham, J., Irvington, plants from	139
Davidson, Prof. George, San Francisco, plants from	130, 131, 202	Dussourt, C., Anaheim, water from	77
Davis, A., San José, water from	77	Duwisin, E., Berwyn, Pa., seeds from	202
Davis, E. W., Santa Rosa, water from	73	Dyer, Hubert, San Francisco, donations from	202
Davis, Fred., Red Bluff, soils from	36	Dyer's wood, described	136
Davis, Horace, San Francisco, plant trials by	146	E	
Davis, J. G., Fresno, soil from	52	Earl, S. F., marl from	37
Davis, J., Oakland, water from	74	Easter, L., Oakland, plants from	139
Davy, J. Burt, description of plants	127, 130, 202	Ecker, Mrs. J. F., Grayson, waters from	76
resignation of	16	Economic botany, report on	127, 153
Dawes, J. G., Fresno, soils and plants from	34, 125	Edwards, C. A., Berkeley, plants from	139
Day, Alfred, Chatsworth Park, plant trials by	143	Edwardsia, description and reports on trial of	144
Dean, R. G., Brentwood, soils from	34	Ehrhorn, E. M., Mountain View, peach-worm observations	105
Deaner, S. C., Woodland, plants from	138		
DeBorra, Dr. Alex., San Diego, plants from	131		

	PAGE.		PAGE.
Ehrman Olive Co., Marysville, soils from	36	Forsyth, Wm., Fresno, soils from	34
El Dorado County, soil and water from	33, 68	Foss, Mrs. C. E., Alpine, plant trials by	143, 145, 146
Elevation of Fall River Valley	25	Foster, A. W., Petaluma, water from	76, 77
Elliott, C. G., plans and estimates for drainage of Fresno district	57	Foster, E. C., Madera, water from	79
Elms for streets	129	Foster, E. H., Tremont, plants from	139
Englehardt, Dr. A. E., Glendora, marl from	37	Fowler, D. T., Oakland, institute conductor	18, 20
English plantain, described	137	plants from	130, 131, 133
Entomology, appropriation for	11	soils taken by	23, 25, 37
review of work in	15, 104	Fox, Henry, Healdsburg, insecticide from	93
Ervum, trials of varieties	164, 165	Foxtail-grass, for silage	131
Essex rape, trials with	164	on alkali land	48
Etter, Albert F., Ettersberg, plant trials by	143, 146, 149, 150, 152, 153	Franceschi, Dr. F., Santa Barbara, seeds and plants from	102, 135
Etter, A. F., Briceland, soils from	34	Fraser, T. A., Corona, limestone from	37
Eucalypts at forestry stations	196, 201	Frei, A. M., Santa Rosa, water from	74
distributed, and reports on trial of	136, 142	French prunes, analyses of	90
for streets	129	Fresno, experimental plots near	111
Euphorbia splendens	131	Fresno County, grasshoppers in	106
Evergreen perennial grass, trials of	150	soils and waters of	33, 73, 77, 80
Evens, R. J., Palmdale, plants from	139	vines from	112
Evans, T. B., Hollister, meat from	99	Fresno drainage district, plans and estimates for	57
F		Friedberger, L., Clements, water from	73
Fairchild, C. H., Grafton, soil from	36	Fried, J., Coalinga, water from	77
Fallen Leaf Lake, analysis of water of	68	Frost, M., Point Reyes, plants from	137
Fall River Valley, analysis of soil of	26	Fruit juice, alcohol in	98
description of	24	Fruit of Fall River Valley	25
Farm, agricultural, needed	16	Fruits, trial of	151
Farmers' Clubs, important work of	21	Fruit World Pub. Co., Los Angeles, soil from	35
Farmers' Institutes, appropriation for	11, 18, 19	Fumigation dosage, summary of bulletin on	109
coöperation with Department of Agriculture	22	Fumigation, measurements of tents for	106
review of work of	18, 19	Furze or gorse	131
Feeding-stuffs, Kansas stock-melon trials	83, 149	G	
Fennel, H. T., Mountain View, soils from	35	Gaines, E., Fresno, soils from	34
Fenugreek, description and trials with	147, 178, 189	Galloway, A. J., Healdsburg, vines from	113
Ferguson, F., Santa Ana, plant trials by	145	Gammon, E. and W., Courtland, soils and waters from	35, 68, 76
Ferris, J. W., San Francisco, shell debris from	37	Gardens, ornamental trees for	144
Fertilizers, analyses of	83, 88	Garibaldi, F. A., Mendocino, plants from	139
Fertilizer control work	10, 15	Gaye, A., Sebastopol, vines from	113
Fertilizer, Nature's Wonder, analysis of	93	Gedge, C. J., Oakland, plants from	139
Fertilizing hay crops	171	Geisel, E. E., San José, soils from	35
Festuca	137	Geisel, E. G., Evergreen, water from	74
Fick, Henry, Colusa, soils from	34	George, William, Grass Valley, plants from	135
Field peas from Russia, trials of	148	German Imperial Consul, plants from	138
Figs, report on culture tests	171, 192	Gerberding, E. O., Hueneme, plants from	139
Figs, Smyrna, sugar in	98	Giamipoli, G., Los Gatos, water from	74
Financial statements	7, 142	Gibbs, Ralph, Berkeley, plants from	131
Fisher, Dr. C. W., San Mateo, coöperation with	117	Gier, Theo., Oakland, olive oil from	99
Fischer, W., Mountain View, plants from	137	Gilbert, Mrs. E. J. C., Berkeley, plants from	139
Flavors in butter caused by weeds	121	Gilbert, O., Burlington, Vt., plants from	139
Flory, J. F., Lemoore, bees from	99	Gillmore, N. C., Sespe, plant trials by	150, 151
Flour, poisoning with corn-cockle	131	Gilly, Mr., Berkeley, plants from	135
Flushhacker, A. & Co., gypsum from	37	Gilman, M. F., Banning, plants from	139
Fodder plants	150	Ginko as street tree	128
Foods and feeding stuffs, examination of	83	Gird, H. H., Bonsall, plants and seeds from	132, 145, 202
Forage grasses at Paso Robles	177	plant trials by	145, 147, 148, 149
Forage plants, experiments with	147, 148, 149, 154, 164, 188	Glaser, F., Geyserville, vines from	112
Forbes, T., Napa, soils from	35	Glenn County, soils and waters from	29, 30, 33, 68, 75
Forestry stations, reports on	195, 200	Gloeckner, C., Sebastopol, water from	77
Forrer, Julius, foreman, Tulare	179	Gluten and macaroni wheats	174, 177
		Gluten, ground gum, analysis of	88

	PAGE.		PAGE.
Gnawed canary-grass	131	Hampton, J., Oakland, water from	74
Goddard, P. E., Berkeley, plants from	139	Hanger, W. W., Fresno, vine roots from	112
Goethe, Mr., Bakersfield, donations from	202	Hanson, H. L., Nicolaus, water from	73
Goethe, W. N., Bakersfield, plants from	139	Harbison, L. J., Vacaville, plant trials by	152, 153
Golden West Co., San Francisco, molasses from	99	Hardpan, analysis of	33
Goodall, Arthur, San Francisco, plants from	137	Harman, L. S., Rosedale, water from	76
Goodhart, Miss K., Leon, plants from	139	Harroun, P. E., Lytle Creek, water from	68
Gooseberry, trials of	152	Hart, J. V., Palo Verde Valley, soils from	35
Gorse or furze	131	Haskell, S. H., Porterville, plant trials by	143, 146, 152
Graham, A. E., analyses by	26, 33	Hathaway, E. L., Sebastopol, grape leaves from	113
Graham, R. W., Danville, water from	69	Havens, F. G., Imperial, soil from	36
Grain damaged by water, analysis of	94	Hay fertilization on red and granite soils	171, 172
Grain plants, trials of	164, 166	Hay, J. C., Imperial, soil from	36
Granite soil, apples and hay crops on	168, 172	Hays, J. A., Harbin Springs, plants from	139
Grano, analysis of	88	Head, E. L., San Francisco, plants from	138
Grant, Geo. B., Pasadena, plants from	135	Heintzen, George, Brown's Valley, plants from	130
Grape exhibit at Hanford	184	Helvella lacunosa	137
Grape pomace, fertilizing value of	98	Henderson, J., Berkeley, plants from	135
Grapes, statistics of	185, 192	Henningson, A., Fresno, vines from	112
Grasses, trials of	150, 161	Henn, Mrs. N. O., Alameda, plants from	131
Grasshoppers, outbreak and control	106, 109	Hermitage Tobacco Co., Hermitage, soils from	35
Grau & Werner, Irvington, vines from	112	Hessel, Andrew, Santa Rosa, white earth from	36
Gray, Dr. R. A., Colusa, soil from	34	Hetherington, Mrs. A., Nestor, water from	77
Gray, E. F., Folsom, soils from	35	Hewlett, L., Oakland, water from	77
Gray, G. I., San Diego, water from	75	Hickman, J. R., Fresno, soils from	34
Gray, Robert B., analyses by	26, 33	Hildebrand, Clarence, Guernsey, plant trials by	147, 149
Greathead, C. T., Tancred, water from	73	Hilgard, E. W., benefits of drainage humus of Oregon soils	64, 31
Green, J. W., Soquel, plant trials by	149	increase of soluble matter in bread by toasting	100
Green-manure and forage plants, experiments with	147, 148, 149, 154, 164, 188	letter of transmittal	9
Grimes, F. G., Los Angeles, plants from	135	publications by, on alkali lands	38
Griesmer, J. W., Illinois, donation from	203	Hilleary, L. N., Poway, water from	71
Grindstone Creek, analysis of water of	68	Hill, I. C., Dos Palos, plant trials by	146
Gross, T. T., Janesville, plant trials by	148	Hill, J. A., Hanford, water from	76, 77
Ground gum gluten, analysis of	88	Hill, R. P., Eldridge, water from	73
Grove, W. G., Oakley, water from	68, 76	Hilton, Samuel, Olinda, soils from	36
Grow, G. B., Alpine Valley, water from	75	Hirschfeldt, Edwin, San Jacinto, plant trials by	147, 151
Grow, G. B., Paradise Valley, water from	77	Hobe, Miss A. M., meteorological tables	160
Guill Bros., Chico, soils from	34	folder,	
Guill Bros., Colusa, plants from	34, 132	Hobson, D. W., Witter, water from	71
Guilford, C. D., Creston, plant trials by	145	Hoelscher, W., San Francisco, wine from	98
Guilfoyle, W. R., Australia, donations from	202	Hogan, G., Lodi, vine roots from	112
Gundlach-Bundschu Co., extracts from	99	Hog cholera, existence, symptoms, and treatment of	114
Gurney, S. R., Klepstein Springs, water from	71	Hogg, H. C., Saratoga, soils from	35
Guss, L. L., Oakley, plant trials by	143, 144, 145, 146, 147, 148	Holser, R. F., Piru, water from	71
H		Holstein-Friesian cows, butter-fat tests of	119
Hagerman, E. H., work in Dairy school	120	Honey, analysis of	99
Haines, S. W., Chula Vista, water from	77	Honey from mesquite	136
Hair-grass	131	Hoopa Valley, analysis of soil of	26
Hairy vetch, described and trials with	147	Hopping, Ralph, Kaweah, plants from	135
Halberd-leaved orach	131	Horehound, described	133
Hale, Wm., San Francisco, plants from	139	Horn, Dr. H., Sausalito, water from	81
Hall, G. P., San Diego, waters from	79	Horn, D. W., Visalia, soils from	36
Hall, H. M., appointment of as botanist of station	16	Horne, W. L., Berkeley, wine residue from	98
description of plants	135	Horsburgh, J. H., Paso Robles, water from	71
report on economic botany	127	Horse-weed, described	132
Hall, W. W., Cornell University	120		
Ham, W. H., Highland, soils from	35		
Hamilton, John, Farmers' Institutes specialist	22		
Hamlet, O. C., Sausalito, water from	81		
Hammond, C. M., Upper Lake, soils sent by	26, 34		
Hampton, J. M., Live Oak, soils from	36		

	PAGE.
Horst Bros., Wheatland, plants from ..	139
Hotle, Messrs., Cloverdale, waters from	70
Howland, C. H., Inglewood, water from	75
Hultberg, N. O., Turlock, soils and waters from	36, 79
Humboldt County, plant trials in	143, 146, 149, 150, 152, 153
soils of	26, 28
waters from	73
Humphrey, H. C., Etiwanda, vines from	112
Humus of Oregon soils	31, 32
Hundertmark, H., Sacramento, plant trials by	153
Hunt, A. B., Thermalito, soil from	34
Hunter, J. M., Bakersfield, plants from	132
Hunter, J. S., work of	106, 107, 110
Huntley, D. B., Rhodesia, South Africa, plants from	139
Hyde, Dr. A. F., Merced, sandstone from	37
Hyde, J. H. Rio Vista, boiler scale from	37
Hyland, M. H., San José, marls from ..	37

I

Imperial granum, analysis of	87
India hemp, described	137
Indio, analysis of soil from	29, 30
Indio Water Company, waters from ..	75
Insecticide, Nature's Wonder fertilizer, analysis of	93
Insecticides, arsenical, summary of bulletin on	109
Ironwood, description of	138
Irrigating ditch of Fall River Valley ..	25
Irrigation Department, coöperation with	17, 34
Irrigation ditches, analyses of waters of	78, 79
Irrigation, effect of excess on land and crops	57
Irving, W., Riverside, waters from	68
Islay, described	145
for parks and yards	129
Izard, E. M., Bryn Mawr, soils from	35

J

Jacaranda ovalifolia, described	132
Jacks, D., Monterey, plants from	37, 131
Jacquard, J., Sebastopol, cuttings from ..	113
Jaffa, M. E., alkali investigations	38
analyses of soils by	29, 33
Jajoba, described	132, 145
Janney, R. L., Paso Robles, water from	75
Japanese millet, trial of	151
Japanese privet, described	132
Jarosse vetch for green-manure	148
Jasmines	128
Jelopote	131
Jenkins, E. J., Fruto, waters from	75
Johnson, B., Walters, plants from	130, 133
Johnson, B. W., Los Angeles, soils from	35
Johnson, C. E., Staten Island, plants from	132
Johnson-grass, described	132
Jonas-Erlander-Davis Co., wheat from ..	94
Jones, Dr. F. C., Redondo, soils from	55
Jones, F. C., Imperial, soils from	36
Jones, J. S., analyses by	26, 33
Jones, Roy, patron of forestry station ..	196
Joost & Son, Alameda, vines from	112
Joseph, M., Nordhoff, plants from	135
Justi, Leopold, Glen Ellen, plant trials by	152

K

	PAGE.
Kanaas stock-melon	149
Kearney, Theo., Fresno, soils from	34
Kelley & Henry, San Francisco, plants from	139
Kellogg, Mrs., Berkeley, donation from ..	202
Kelly, J. F., San Diego, soils from	36
Kennedy, J. F., Oakland, water from	77
Keown, Mr., Berkeley, plants from	139
Kern County, waters from	69, 71, 73, 76
Kerz, A., Ramona, plants from	135
Khama melon, description and trial of ..	149
Kidder, Miss L., Berkeley, plants from ..	135
Kimball, C. F., Redding, soils from	36
King, Arthur, Berkeley, donation from ..	202
Kingsbury, G. W., Sebastopol, water from ..	74
Kings County, plant trials in	147, 149
vines from	112
waters from	68, 73, 76, 77, 79
Kings River, analysis of water of	68
Kinney & Dudley, Ocean Park, waters from	75
Kirkwood, R. C., Mountain View, water from	74
Kirkman, Wm., work of	107
Klein, Morris, Los Angeles, soil from	35
Kleinsorge, Wm. E., Loomis, soil from ..	35
Klepstein Springs, analysis of water of ..	71
Kloss, Miss Florence, Glenwood, soil from	35
Korslad, T., Dos Palos, water from	73
Krich, Mrs. G., Selma, vines from	34, 112
Kunish, H., Lower Lake, water from	71
Kurrajong as shade tree	137

L

Lake and stream waters, analyses of	67, 68, 71
Lake County, plant trials in	144
soils and waters	26-29, 69, 71
Lamb's-tongue plantain, described	132
Landsborough, L. M., Florin, soils from ..	35
Langworthy, J. L., Modesto, soil from	36
Larsen, A. J., San Francisco, soils from ..	36, 56
Larson, L. M., Lathrop, plants from	139
Lassen County, plant trials in	148
soils of	24
Lathyrus, trials of varieties	154, 155, 165, 188
Lava-bed region of the State	23, 24
Lawns, yards, and parks, ornamental trees for	129, 144
Lawrence, G. E., Lodi, plants from	139
Leach, T. J., Sunol, vines from	112
Lea, E. H., analyses by	25, 33
Lecureuil, Isadore, Santa Cruz, plant trials by	145
Leek, N. E., Modesto, plants from	131, 133
Lee, M. A., Berkeley, prune brandy from ..	98
Lee's Lake, analysis of water of	68
Lee, T., Del Monte, plants from	133
Legislative appropriations	7, 10, 11, 18, 19
Lehn, Wm., Forestville, water from	74
Leitz, C. F., San Francisco, vines from ..	112
Leme, F. P., Brazil, donations from	203
Lemon Home Colony, Oleander, soils from	34
Lemon juice, solubility of aluminum and tin in	91
Lentil, Big Hiller, trials with	165
Lentils, for food and green-manure	149
test-plot cultures of	189
Leonard, Miss Alice B., Del Mar, soils from	36
Letter of transmittal	9
Letters written by the Station staff	9

	PAGE.		PAGE.
Leuschner, A. O., meteorological observations by	folder, 160	March rape, trials with	164
Levy, Albert, Cactus Valley, water from	70	Marin County, complaints from	116
Levy, S., Los Angeles, sulfur ore from	98	waters from	73, 81
Lewis, F. C., Fowler, soils from	34	Mariner & Hoskins, Los Angeles, honey from	99
Lewis, L. L., El Verano, donations from	203	Marshall, S., San Bernardino, water from	79
Lhoo, trial of	146	Martin, Miss Mimi, Pasadena, soils from	35, 52
Library of Experiment Station	203	Martin, W. J. B., Redding, plant trials by	147
Lime, application on lands	172	Mathes, Z. C., San Diego, water from	77
Linda Vista mesa, analysis of soil of	29, 30	Mathews, J. H., Healdsburg, plants from	137
Linden for streets	129	Mattern, Mrs. F. W., Los Angeles, plants from	139
Linder, K. A., Dinuba, water from	73	Mayten as a street tree	128
Linseed meal, analysis of	84, 85	McArthur, John, Fall River Valley	25
Lion's-ear	137	McArthur, J. T., Grizzly Island, soils from	35
Little Stony Creek, analysis of water of	68	McClare, H. D., San José, soils from	35
Livermore, C. W., Pasadena, donations from	202	McCubbin, J. C., Reedley, plants from	131, 132, 136
Lobinger, L. A., Sunnyside, water from	77	McDonald, E. C., Aptos, soils from	36
Lockett, S. W., Corona, water from	68	MacDonald, Mrs., Poway, plants from	139
Look, C. R., San Francisco, earth from	37	McGowan, J. N., Monterey, milk from	99
Loose-strife, described	137	McHardy, Alex., Chico, soils from	34
Los Angeles County, coopération of Horticultural Commissioners	110	McKenzie, M., Mountain View, water from	71
plant trials in	143, 144, 147, 150, 152	McLain, D. G., Salinas, water from	69, 71
vines from	112	McLaughlin, Mrs. B. A., Glenwood, water from	69
waters from	68, 71, 75, 76, 77, 79	McMillan, A., Shandon, water from	71
Lotus, trials of varieties	155	McNeill, J., Ceres, soils from	36
Loughridge, R. H., report on soil examinations	23	McPike, H. C., Oakland, water from	74
work of	13, 18, 38, 39	Mechanical composition of California soils—table	25, 33
Lowe, M. D., San Luis Obispo, soils from	36	Medicago, trials of varieties	155, 159
Lupins, for green-manure, trials of	132, 148	Mee, Timothy, Los Gatos, soils from	35
test-plot cultures	188	Melde, Henry, Eureka, donations from	202
trials with varieties	158, 159, 165	Mellen, Mrs. H., Beaumont, plants from	139
Lyes, concentrated, analyses of	92	Melons on alkali lands	46
Lyle, M. R., Oakland, soils and waters from	34, 49, 75, 76, 79	Mendocino County, soils and waters from	26, 28, 30, 33, 70
Lyman, E. R., analyses by	32	Merced County, plant trials in	146
Lyonothamnus floribundus for lawns and yards	129	waters from	73
M		Merk, S. D., Paso Robles, waters from	68, 75
Macaroni wheats	177	Merriam, H. A., San Francisco, extract from	99
Macartney, D., Antioch, rocks from	36	Merritt, Mr., Helix, plants from	135
Mackie, W. W., bulletin on oak leaves for forage	89	Merritt, E. B., Anaheim, water from	75
plants from	135, 139	Mesquite beans, described	136
soils and waters from	26, 68, 74	Mesquite trees on alkali land	46
Mack, S. C., Fair Oaks, soils from	35	Meteorological record at Berkeley	161
Mack, W. E., Paradise, soils and olive oil from	34, 99	at substations	163, 175, 176, 180, 187, 199
Madera County, waters from	79	Meyer, E. G., Lemoore, trees from	112
Maddrill, James D., meteorological tables	folder, 160	Meyers, H. H., Sacramento, donations from	202
Maechten, Jacob, Covina, plant trials by	143, 147	Migliavacca Wine Co., Napa, wines from	98, 112
Mahaffy, Dr. A. L., Corning, soils from	36	Milk, rosy or slimy, cause of	116
Maiden-hair tree for streets	128	Milkweed, narrow-leaved, described	137
Maiden, J. H., Sidney, donations from	202	Milkweed, poisonous qualities of	134
Mailing list, increase of	9	Miller, H. E., Rocklin, vines from	112
Major, E. W., work of	16, 17	Miller, R. L., Salida, soils from	36
Mallow, described	137	Millets, trial of varieties	151
Malta vita, analysis of	87	Mills, J. W., Ontario, foreman of sub-station	186
Manning, Mrs., Hooper, donations from	202	remarks on drainage	82
Manning, Mrs. M. H., Fort Bidwell, plants from	139	Milnes, C. S., Eureka, water from	73
Manson, Marsden, San Francisco, plants from	203	Minerals and rock specimens received for examination	36
Many-flowered millet-grass, described	133	Minnesota station, bulletin quoted	100
Many-flowered ray-grass, described	132	Minthorn, T. W., Los Angeles, plants from	139
Maple trees for streets	129		
Marbut, E. H., San Juan, waters from	75, 76, 77		

	PAGE.
Mitchell, L. J., Fowler, soils from.....	34
Mitsmain, M. B., work of.....	107
Modoc County, soils of Surprise and Big valleys.....	23, 33
Molasses, analysis of.....	99
Molasses-grass.....	177
Monterey County, coöperation with.....	107
plant tests in.....	144
water from.....	69, 71, 76, 77, 79
Monterey pine, described.....	133
Montgomery, D. F. S., Tulare, grapes from.....	113
Montgomery, Victor, Santa Ana, lime- stone from.....	37
Moore, Dr. V. A., Cornell University, coöperation of.....	17, 117
Moore, J. H., Lancha Plana, water from.....	71
Moore, Mrs. A. A., Montalvo, water from.....	76
Moore, Mrs. E. N., Elmhurst, water from.....	74
Morehouse, W. R., San Jacinto, water from.....	69
Morey, G. E., Needles, soils from.....	35
Morrisey, W. H., Orland, soils from.....	34
Morse Seed Co., Santa Clara, soils from.....	35
Mothermal, N. W., Hanford, water from.....	73
Mournian, Ira, Bethany, plants from.....	137
Mountain balm, medicinal qualities of.....	138
Moulton, Miss M. E., Campbell, plants from.....	112
Mulberry, trials of.....	146
Muma, I. J., Brandy Creek, water from.....	68
Murphy, A. S. Hollister, limestones from.....	37
Myers, Dr. H. C., analyses by.....	23, 33
Myers, R. H., Hanford, plants from.....	139

N

Nacimiento River, analysis of water of.....	68
Napa County, plant trials in.....	152
water from.....	143, 146, 147, 148, 149, 151,
wine from.....	69
Narbonne vetch for green-manure.....	112
Narrow-leaved milkweed.....	148
Nature's Wonder fertilizer-insecticide, analysis of.....	137
Neal, J. W., resignation as foreman.....	93
Nectarines, at San Joaquin Valley sub- station.....	174
report on culture tests.....	182
Neligan, Minnie, Nipomo, plant trials by.....	169
Nevada County, waters from.....	146
Newcomb, W. I., Sebastopol, plants from.....	68
Newspapers received in reading-room of station.....	136
New Zealand oil-tree described.....	203
Nichols, C. O., Bostonia, soiland waters from.....	145
Nichols, J. E. E., Pomona, plant trials by.....	36, 77
Nicker-nut, described.....	144
Nightshade, blue-flowered, described.....	130
Nilsson, L. C., Gregory, water from.....	137
Nitrate of soda on hay crops.....	69
Nitrogen in humus of Oregon soils.....	171, 172,
Noble, G. C., Wiseburn, vines from.....	32
Norman, S. A., Oakland, waters from.....	112
Norrish, A. F., Clovis, soils from.....	74
Norton, Fred, Hynes, soils from.....	34
Norton, A. D., Lodi, soil from.....	35

	PAGE.
Norton, C. W., Stockton, cuttings from.....	112
Nostoc pruniforme, described.....	133
Nowak, G. F., Santa Paula, waters from.....	77
Nut-grass, method of eradication.....	133
Nut oil from candle-trees.....	135
Nut-sedge.....	133
Nye, Miss A. E., Willows, plants from.....	133

O

Oakland Enquirer, waters from.....	77
Oak leaves, value for forage, summary of bulletin.....	89
Oaks at Chico station.....	200
Oats, trials of.....	150, 167
Ochrus pea, test-plot cultures.....	188
Oil of seeds of Polygala apopetala.....	102
of the New Zealand oil-tree.....	145
Olive-oil, liquidity of.....	103
manufacture.....	89
samples tested.....	99
substitute for.....	135
Olives, analysis of brine from.....	92
report on culture tests.....	170
Olson, G. T., Surf, water from.....	71
Ooley, J. H., in charge of substation.....	174
Onobrychis sativa, trial with.....	160
Ookow or wild hyacinth.....	137
Opp, George, Santa Ana, water from.....	71
Orange and lemon rot, investigation.....	104
Orange County, Texas fever in.....	114
plant trials in.....	145
waters from.....	75, 76, 77, 79
Oranges, statistics of.....	190
Orchard-grass, trials of.....	150
Orchards of substations.....	168, 178, 181,
Oregon soils, humus of.....	31
Orland, analysis of soils from.....	29, 30
Ornamental trees for California.....	128
Ornithopus sativus, trial with.....	159
Orr, O., Gilroy, cheese from.....	99
Osage, analysis of soil from.....	26
Osborne, D. J., San Francisco, fungus from.....	137
Osburn, H. C., Los Gatos, soil, water, and prunes from.....	35, 69, 90
Ostrom, Mr., Wheatland, soil from.....	36
Otay, J. J., Yreka, salt from.....	37
Otis, McAllister & Co., San Francisco, meal from.....	84
Overacker, H., Jr., St. Helena, plant trials by.....	143, 146, 147, 148, 149, 151,
Overton, J., Fillmore, waters from.....	77
Owens, Mary, Ventura, water from.....	71
Owings, S. T., Armona, water from.....	73, 79
Oxalis corniculata, described.....	133
Oxalis crenata, trials with.....	167

P

Pacey's perennial-grass, trial of.....	150
Pacific Rural Press, plants from.....	136
Paget, R. G., Felton, plant trials by.....	152
Pajaro Valley, investigations in.....	107
Palache, Mrs., Berkeley, plants from.....	132
Palms for streets, yards, and parks.....	129, 130
Palo de Hierro, description.....	138
Pammel, Prof. L. H., Ames, Iowa, plants from.....	134, 139
Panicum pruriens.....	137
Parker, C. H., Vacaville, water from.....	73
Parker Iron Works, San Bernardino, water from.....	79
Parker, Ezra, Illinois, donations from.....	202
Parsnips, trials with.....	160
Parks, ornamental trees for.....	129, 144

	PAGE.		PAGE.
Rinder, T. T., Monterey, plants from	140	San Joaquin County, plant trials in	148
Riverside County, analysis of soils		specimens from	112
from	29, 30, 33	waters from	73, 76, 79
plant trials in	147, 150, 151	San Joaquin Valley substation, distri-	
waters from	68, 69, 70, 75, 76, 79, 80, 81	bution of alkali in soil of	40
Riverside Trust Co., water from	79	report on work of	179
Rixford, G. P., San Francisco, seeds		San Luis Obispo County, plant trials	
from	144	in	145, 146, 151
Roberts, F. H., Yuba City, vine from	113	report of substation in	174
Roberts, G., appointed Fertilizer Con-		soils and waters from	33, 68, 69, 71, 75
trol Chemist	15	San Mateo County, cuttings from	112
Roberts, Mrs. S., Elmira, water from	71	waters from	74, 76, 80
Roca, R., Hollister, water from	69	San Ramon Valley, Contra Costa Co.,	
Rochford, R. T., East Slope, water from	69	soil of	26
Rock, John, Niles, plants from	130, 131, 134	Santa Barbara County, soils and waters	
Rodgers, N. G., Los Gatos, vine leaf		from	31, 69, 75, 76
from	112	Santa Catalina Island, islay from	145
Rodman, R. S., Lakeport, water from	69	Santa Clara County, plant trials in	147, 148
Roeding, George, Fresno, figs from	98	prunes and vines from	90, 91, 112
Rollins, H. L., Corona, soils from	35, 51	water from	69, 71, 74
Roots, effect of high water-table upon	57	Santa Clara River delta, analysis of	
Ropy or slimy milk	116	soil of	29, 30
Roseman, F., Echo Station, water from	70	Santa Cruz County, cooperation of	107
Roth, J., Ventura, water from	69	plant tests in	143, 145, 147, 148, 149, 150, 152
Round Valley, Mendocino County,		water and vines from	69, 112
analysis of soil of	26, 33	Santa Maria Valley, analysis of soil of	33
Round Valley, Modoc County, analysis		Santa Monica forestry station	196
of soils of	24	waters from	71, 75, 77
Roussel, W. H. & Co., San Francisco,		Santa Ynez Valley, analysis of soil of	30
score of cheese	121, 122	Saracco Valley Springs, water from	70
Rowe, F. H., Mescalito Islands, water		Sarbaugh, A., Indio, soil and water	
from	71	from	35, 47, 79
Roy, Eugene G., Crescent City, soils		Sargent, Geo. H., Whittier, soils from	35
from	34	Saticoy Development Co., water from	79
Rozell, Albert, Los Angeles, honey		Saunders, A., Valle Vista, water from	69
from	99	Sawyer, Mr., Massachusetts, donations	
Russian field pea, trial of	148	from	203
Russian millets, trial of	151	Sayre, A. L., Fresno, vines from	112
Russman, P. W., Santa Rosa, vine from	113	Schiemann, Louis, Sacramento, plant	
Russ, Z. & Sons, Eureka, plants from	139	trials by	143, 146, 152
Rust, R. C., Jackson, patron of substa-		Schmid, K. H., Dehesa, water from	70
tion	162	Schoeffe, G., Oakland, soils from	35, 47
Rutter, James, Florin, soil from	35	Schultze, L. C., Hedges, plants from	136
Rye, trials with	166, 167, 189	Scorpiurus vermiculata, trial with	159
Giant Winter, trial of	150	Scott, J. S., El Cajon, soils and water	
		from	36, 70
S		Scott, Mrs. M., Oakland, water from	74
Sacramento County, cuttings from	112	Scott, S. N., Bakersfield, soils from	34
grasshoppers in	106	Scours in calves, remarks on	117
plant trials in	143, 144, 146, 152, 153	Screw beans described	136
soils and waters from	29, 33, 68, 73, 76	Sea-blite	136
Salinas River, analysis of water of	68	Sea Island cherry, described	145
Saltbushes, culture of	177	Sears, S. V., Corona, soils from	35
San Bernardino County, plant trials in	150	Seaside oats, a sand-binder	134
report of substation in	136	Seeds, collection of	127
specimens from	112	distribution of	141
waters from	68, 79, 80, 81	mixed with corn-cockle	131
Sanberg Brothers, Neenach, plant trials		Sehn, Wm., Forestville, soils from	36
by	150	Sehorne, A. W., Elk Creek, rocks from	36
San Benito County, plant trials in	148	Selma Sand Hollow, drainage of, bene-	
waters from	69, 70, 75, 76, 77	ficial	58
Sanborn, W. E., Corning, soils from	36	Sesame meal, analysis of	85
Sanderson, A. J., St. Helena	69	Shaffer, J. S., Defender, plants from	140
Sand-binders	134	Sharr, A., plants from	137
San Diego County, plant trials in		Shasta County, description of Fall	
soils and waters from	143, 145, 146, 147, 148, 149	River Valley	24
from	29, 30, 33, 68, 70, 71, 75, 77, 80	plant trials in	147
Sanford, J. A., Stockton, plants from	140	soils and waters from	33, 68, 69
San Francisco, plant trials in	146	Shattuck, Mrs. R. M., Berkeley, water	
wines from	112	from	74
Sanitarium Food Company, St. Helena,		Shaw, G. W., analyses by	14, 38, 53
sample from	98, 99	foods and feeding-stuffs	83
Sanitary examination of waters	78, 79	sugar industry, summary of bulletin	9
		Shaw, Mrs. E., Sebastopol, plant trials	
		by	144

	PAGE.		PAGE.
Sheep sorrel, described	133	Southern California, climbing vines for	128
Shelley, H. O. H., Cupertino, plants and pomace from	98, 140	Southern Coast Range substation, re- port on	174
Shelley, S. H., San José, soils and prunes from	35, 90, 91	Soy bean, trials with	155
Shellhouse, E. J., Roseville, soils from	35	Spartium junceum, described	134
Sherlock, H., Gilroy, vine roots from	112	Spear, John S., Yuma, soils from	53
Shinn, C. H., Niles, bulletins by	17, 178, 186	Spetzen, H. F., Watsonville, vine from	112
French prunes from	98	Spiny clot-bur, described	132, 133
Shirrell, Mrs. Alma, Santa Cruz, plants from	135	Spraying with distillates, summary of bulletin	110
Shudy, Mrs. L. L., Santa Rosa, water from	76	Sprays for red spiders	110
Shutt, W., foreman, Santa Monica	75, 135, 196	Spreading brome-grass	134
Sickler, M. M., Pala, earths from	36	Sprenger, C. C., Italy, donations from	202
Sierra County, water from	69	Springer, E. F., Alhambra, soils from	35
Silk-tassel tree, description	138	Spring waters, analyses of	66, 69
Silk vine, described	133	Stabler, H. P., Yuba City, observations on peach-worm	105
Sill, G. W., Watsonville, soils from	35	Stall, F. W., Marysville, soils from	36
Sillman, W. A., Watsonville, donations from	202	Stanislaus County, plant trials in	153
Silos, bronco-grass for	130	waters from	76, 79
foxtail and alfalfa for	131	Stansell, E. O., Riverside, waters from	75
Silver- and broad-leaf maples for streets	129	Start, G. H., San José, soils	36
Simonds, F. K., Los Angeles, water from	75	Station Council, organization of	12
Sinnard, L. G., Paso Robles, soil from	36	Stearns, Elmer, Los Angeles, donations from	202
Skoegard, N. C., Colorado Desert, soils from	36	Steele, G. H., Pescadero, plants from	135
Sleepy-grass, description	138	Stein, M. P., Lodi, soils from	36
Slickens, analysis of	33	Stern & Co., San Francisco, plants from	131
Small, R. P., Ethanac, rocks from	37	Steude, P. H., Newcastle, clay from	37
Smith, A. B., Campbell, water from	74	Stewart, G. H., Palos Verdes Rancho, water from	71, 79
Smith, J. E., Sacramento, water from	73	Stillson, C. L., Chico, soil from	34
Smith, J. S., Boulder Creek, water from	69	Stocking, Miss M. L., Berkeley, plants from	140
Smith, Miss M. S., Yuba City, soils from	36	Stone, Thomas, Pasadena, soils from	34
Smith, Mrs. M., Mountain View, soils from	35	Stony Creek, analysis of water of	68
Smith, R. E., appointed plant patholo- gist	11	Stout, O. V. P., Fresno, soils and waters from	34, 54, 80
Smith, W. D., Redlands, soils from	35, 53	Stover, A. P., Imperial, soil from	36
Smilax	134	Strawberries, trials of	151
Smyer, S. E., Le Grande, plants from	140	Stream and lake waters, analyses of	67, 68
Smyrna figs, sugar in	98	Street and ornamental trees for Cali- fornia	128, 129
Smyth, B. U., San Francisco, plants from	130	Streeter, D. M., Biggs, plants from	134
Snow, F. J., analyses by	33	Strong, Gen. J. C., Los Gatos, water, oil, and vines from	69, 71, 99, 112
Snyder of Minnesota quoted	100, 101	Stuart, A. V., San José, olive oil from	99
Soap plant, described	136	Stubenrauch, A. V., report on economic garden	153
Soap-root	134	reports on substations	17, 161
Soap-tree, Chilian, description and reports on	144	Substations, discontinuance of	17
Soft chess, described	133, 134	report on	17, 161, 162, 174, 179, 186
Soils, examination of	23	summary of bulletin on work of	201
importance of analyses of	13	Sugar industry, work on	14, 89
of Big or Round Valley	24	Sugar beets, analyses of	88
of Fall River Valley	24	Sugar prunes, analyses of	90
of Surprise Valley	23	Sulfur sprays, summary of bulletin on	110
received for examination	34, 35, 36	Sullivan, Mrs. C. W., Armona, soils and waters from	34, 77
Solano County, plant trials in	152, 153	Summer-fallow system, success of	175
waters from	73, 77, 81	Surprise Valley, Modoc County, analy- sis of soil of	23, 25, 26, 33
Solanum verbascifolium, description	138	Sutter County, waters and vines	73, 113
Solanum wendlandii	128	Swan, Rev. G., Berkeley, plants from	135
Solubility of aluminum and tin in lemon juice	91	Sweet fennel, description and trials of	153
Sonoma County, plant trials	144, 145, 146, 152	Sweet potatoes, sugar in	98
vines from	112	Swett & Son, Martinez, artificial wine color from	99
waters from	69, 70, 71, 73, 74, 76, 77		
Sorghum on alkali land	46		
Southern California substation, alkali soils of	44		
drain waters of	82	Tagasaste, description and reports on trials of	144, 145
report on	186	Tall fescue-grass, trial of	150
		Tall oat-grass	177

	PAGE.		PAGE.
Tangier pea, test-plot cultures	188	U	
Tardiff, Wm., Fresno, soils from	34	Underdrainage as a remedy for alkali	65
Teague, B. F., Exeter, soils from	36, 51	Underwood, T. K., La Mirada, plants from	131
Teague, C. C., Santa Paula, chocolate from	99	University extension in agriculture	18, 20
Teeple, R. W., Perris, marl from	37	Upper Lake, analyses of soils from	26
Temperature at Berkeley and substations	161, 163, 176, 180, 187, 199	V	
Tent measurements for fumigation dosage	106	Valle Vista, elevation of	150
Tevis, A., Placerville, water from	68	Value of oak leaves for forage, summary of bulletin	89
Tevis, W. S., Bakersfield, water and plants from	70, 132, 133, 134	Vanderburg, R. D., Fowler, soils from	34, 50
Texas fever, prevalence, symptoms, and treatment of	114, 115	Vanderburg, R. D., Lemoore, water from	77
Thacher, E. S., Nordhoff, soils from	36	Vanderlinden, P., Santa Rosa, donations from	202
Thaxter, G. C., Redlands, water from	81	Vankirk, G. W., Corona, waters from	75
Thayer, P. R., San Francisco, damaged wheat from	94	Van Loven, E. F., Colton, plants from	133
Thomas, B., Delano, water from	73	Van Winkle, Mrs. H. E., Fresno, soil from	34
Thomas phosphate on crops	172	Vaughan, Rev. W. E., Oroville, soils from	34
Thompson, A. W., Napa, clay from	37	Vaygouny, M., analyses of soils by	29, 33
Thompson, Dr. W., San Bernardino, water from	68	Vegetable marrow, trials of	152
Thompson, John, Kings River, soils from	34	Vegetables, trials of	25, 152
Thompson, J. M., Kern, water from	34, 73, 76	Velvet-grass, described	134
Thompson, Mrs. A. J., Alameda, water and donations from	74, 203	eradication of	138
Thompson, R., San Francisco, plants from	136	Ventura County, plant trials in	150, 151
Thompson, W. A., Glen Ellen, water from	69	soils from	29, 30
Thompson, W. G., Redwood City, donations from	202	waters from	69, 71, 76, 77, 79
Thorber, Prof. J. J., Tucson, donations from	202	Vermineous bronchitis, treatment of	117
Thorns, H. G. O., Roseville, water from	75	Vernon, G. R., Gilroy, soils from	35
Thorander, A. J., Turlock, soils from	36	Verru, H. R., San Mateo, waters from	74, 80
Thoroughbred cows, butter-fat tests of	119	Vetches, test-plot cultures of	188
Timoteo Cañon, analyses of soils of	29, 33	Vetches for green-manuring	147, 148, 149, 155, 156, 157, 166
Tin and aluminum, solubility in lemon juice	91	Veterinary science, review of work in	17, 114
Titlow, J. O., Alameda, plant trials by	152	Vicia narbonensis, trials with	166
Toasting bread, increase of soluble matter by	100	Vicia, trials of varieties	155, 156, 157, 188
Tracy, J. P., Eureka, donations from	202	Vierra Bros., Moss Landing, water from	76, 77, 79
Transmittal, letter of	9	Vierra, E. C., Moss Landing, plants from	136
Tree-tomato, trials of	146	Villinger, L., Lodi, grapes from	112
Trees and shrubs distributed	142	Vines, budding, grafting, and resistant, bulletins on	113
Trees, street and ornamental, for California	128	Vines, climbing, for southern California	128
Triebel, C. A., analyses by	33, 84, 122	Vines received for examination	112
Trifolium alexandrinum, trials with varieties	166	Vineyards of substations	178, 184, 189
Trifolium spinulosum	134	Virgin's bower, described	134
Trifolium, trials of varieties	155, 188, 189	Viticultural appropriation	11
Trigonella, trials with varieties	159, 166	Viticulture, review of work in	16, 111
Trost, A., Palermo, soils from	34	Vogeler & Co., Salt Lake City, plants from	138
Truckee River, analysis of water of	68	Volck, W. H., Berkeley	105, 107, 110
Trumbull & Beebe, San Francisco, plants from	135	W	
Trumpet creepers	128	Wales, Rev. F. H., Imperial, water and plants from	68, 140
Tsama melon, description and trials of	149	Wallace, Grant, Pomelo, plant trials by	144
Tulare County, grasshoppers in	106	Wallrath, M., Colusa, water from	71
plant trials in	143, 146, 152	Walnuts, report on culture tests	171
report of substitution in	179	Ward, A. R., work in veterinary science and bacteriology	17, 114
soils and waters from	33, 73, 76	Ward, W. H., Morgan Hill, plants from	137
Tule soil of Upper Lake, Lake County	26	Ward, Nelson, Compton, soils from	35
Tuley, W. H., Paso Robles, water from	75	Warren, W. H., Los Angeles, plants from	133
Turner, W. M., Sierraville, plants from	134	Washburn, C. A., Pasadena, soil from	35
Turpin, F. B., Eastland, water from	73	Waterbury, J. C., Creston, acorns from	86
Twight, E. H., work of, in viticulture	16, 111, 113	Waterman, W. S., San Diego, water from	71
Twogood, D. C., Riverside, soils from	35		

	PAGE.		PAGE
Waters, analyses of	66-81	Wilbur, Miss Edith, Yuba City, plants	137
demand for analysis of	13	from	76
effect of excess on growing crops	57	Wilbur, W. H., Tulare, waters from	134
Water supply, examination of	13	Wild celery, poisonous qualities of	136
Wattles for streets	129	Wild mustard	140
Watts, Mrs. M. E., Colfax, waters from	73	Wilkinson, E., Geyserville, plants from	36, 50, 77
Weaver, Mrs. S. J., San Francisco, plants	135	Williams, Dewitt B., La Mesa, soils and	69
from	38	waters from	112
Weber, A. H., alkali investigation by	140	Williams, George M., Santa Barbara,	75
plants from	122	water from	98
Weber, O. F., Los Angeles, apparatus	136	Williams, J. H., Porterville, water from	120
loaned by	135	Williamson, W. H., Mills, vines from	149
Webster, J. H., San Francisco, plants	127	Williamson, J. M., Smith Mountain,	149
from	136	water from	150
Wedd, Miss S. A., Berkeley, plants from	127	Wines, analyses of	148
Weeds and poisonous plants, study of	132, 133, 136	Wing, Prof. H. H., Ithaca	36
Weeds, methods of eradication	121	Winter, C. F., Tancred, plant trials by	128
Weedy flavors in butter, removal of	75	Winter lentil for green-manuring, trial	202
Weeks, A. C., Alhambra, water from	36	of	149
Weeks, E., Pescadero, soils from	98	Winter oats, trials of	150
Wehner, W., Evergreen, wines from	34	Winter vetch, trials of	36
Wells, W. H., Oleander, soils from	72	Wishon, A. G., Visalia, soils from	128
Well waters, analyses of	33	Wisterias	140
Wertmueller, F. R., analyses by	134	Wolters, W., Lompoc, donations from	77
West, Dr. J. S., Colusa, plants from	140	Wood, Curtis & Co., Sacramento, plants	15, 104, 108, 109
Westfall, J. C., Sycamore, plants from	138	from	56
Weymouth, C. A. G., Lick Observatory,	85	Wood, H. P., San Diego, water from	112, 132
plants from	94	Woodworth, C. W., report of work	143, 147, 148, 150
Wheat, bran, analysis of	167, 177	"	
damaged by water, fire, and smoke,	151	Wright, Mrs. A. M. E., Selma, soil from	129
analyses of	198	Wrightson, H. W., Oleander, vines and	138
gluten, trials with	36	plants from	71
trial of varieties	34	Wulff, C. C., Watsonville, plant trials	33
Whidney, R. W., Pacoima, trees sent to	76	by	
Whiteley, Dr. E. L., Lemon Grove, soils	74	Y, Z	
from	36	Yards, ornamental trees for	111
Whiting, H. C., Petaluma, water from	76	Yeasts, native, investigations with	138
Whitman, M. L., Ignacio Valley, water	36	Yellow sweet clover or yellow melilot	138
from	34	Yerba santa, medicinal qualities of	73
Whitmore, C. A., Chula Vista, soils	76	Yolo County, waters from	149
from	17, 18, 19	plant trials in	140
Whitney, W. J., Selma, soils from	142	Young, David, Stockton, plants from	35
Whittaker, R. A., Oakland, water from		Young, Oliver, Pomona, soils from	71
Wickson, E. J., report on Farmers' In-		Youngs, O., Covina, water from	33
stitutes		Yuba County, analysis of soil of	112
report of seeds and plants distributed		Zimmerman, A., Los Gatos, grafts from	

IN THE SENATE OF THE STATE OF CALIFORNIA.

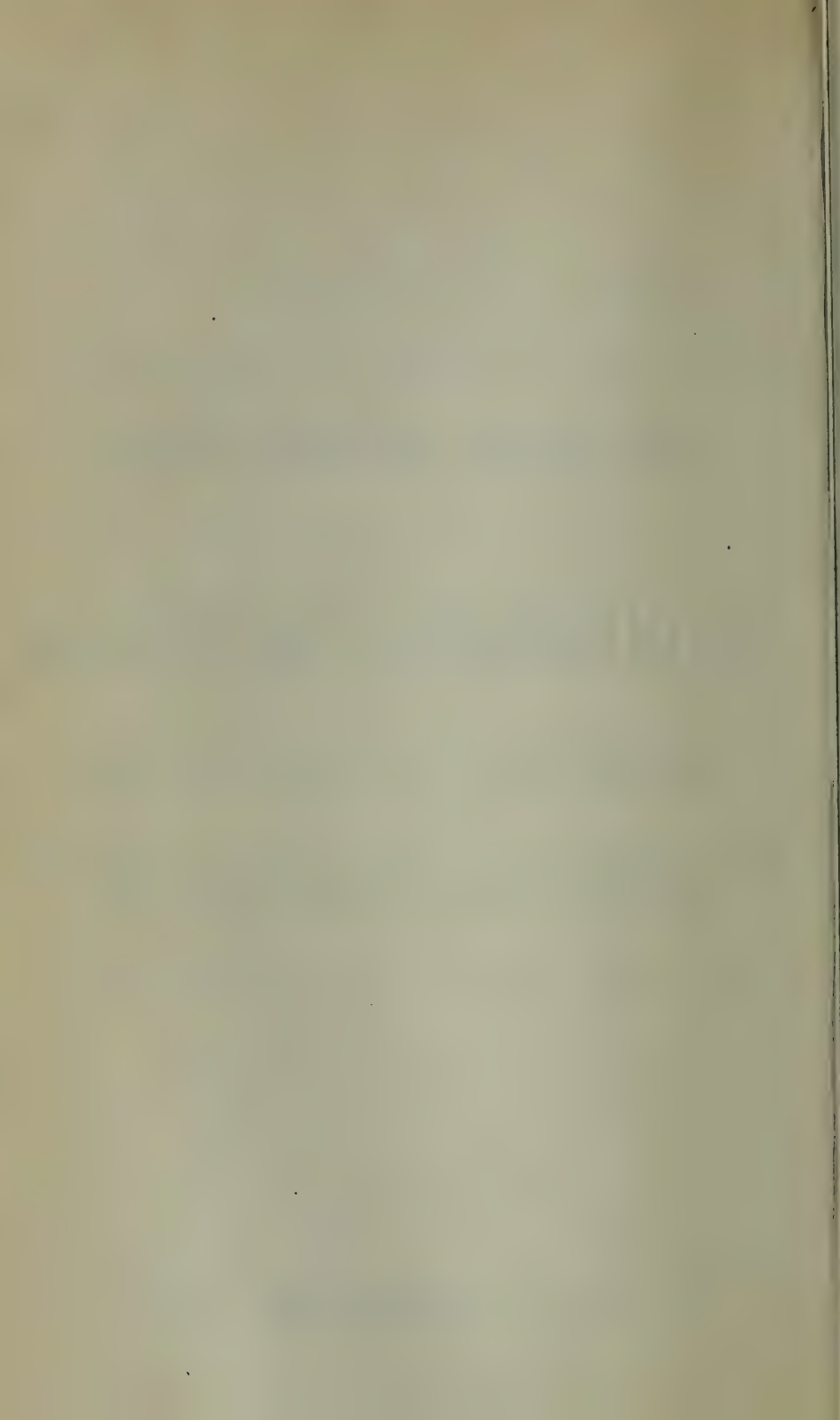
BEFORE

Special Committee of Investigation

CONSISTING OF

Senators Belshaw (Chairman), Simpson, Diggs, Rowell and Ralston.

In the matter of the Investigation of Charges against Senators Emmons,
French, Bunkers and Wright, presented by William Corbin.



IN THE SENATE OF THE STATE OF CALIFORNIA

Before Special Committee of Investigation consisting of Senators Belshaw
(Chairman), Simpson, Diggs, Rowell and Ralston.

IN THE MATTER OF THE INVESTIGATION OF CHARGES AGAINST SENATORS EMMONS, FRENCH, BUNKERS AND WRIGHT,
PRESENTED BY WILLIAM CORBIN.

FIRST SESSION.

MONDAY, January 30, 1905.

THE CHAIRMAN: Please be in order, gentlemen. This committee has met for the purpose of pursuing the investigation under authorization of a resolution which was adopted by the Senate to-day, of charges presented against certain Senators, namely, Senators Bunkers, Emmons, Wright and French. Gentlemen of the committee, I think we should adopt some line of procedure for carrying on this investigation, and follow out a certain line of policy.

MR. SIMPSON: Mr. Chairman, I would suggest that in the main we follow the procedure that would be adopted in any investigation before any ordinary tribunal; that is, that we proceed to call all witnesses that may be obtainable on behalf of this charge, and then permit the putting on of any testimony that may be offered on behalf of the defendants, and in the main follow that procedure. I believe that our investigation should be conducted with more latitude of examination than the mere rules of evidence prescribe, and I move you that the proceedings of this committee, to that extent, be informal in their nature, that we need not be governed by the strict rules of evidence throughout.

THE CHAIRMAN: That is, that the committee shall determine how the investigation shall be carried on.

MR. SIMPSON: Yes, sir.

MR. RALSTON: I second the motion.

(Motion carried.)

THE CHAIRMAN: I will state that Senator Simpson has been selected to do the questioning for the committee, and to put on the witnesses—that is, in the main—and to conduct the case in the main. So, Senator Simpson, if you will, proceed with whatever witnesses you desire.

MR. SIMPSON: Before we proceed, Mr. President, there is another

matter that I desire taken up, and that is, that any witness appearing before this committee who may be represented by an attorney, that the attorney be permitted to question the witness, and that the examination be conducted that way, and that the members of the committee are to conclude the questioning, and bring out any matter they desire.

THE CHAIRMAN: Is there any objection to that?

THE OTHER MEMBERS OF THE COMMITTEE: No.

THE CHAIRMAN: Such will be the order.

MR. SIMPSON: At the instance of the committee, a subpoena issued for Mr. Corbin, who I believe is present this evening, and I will ask Mr. Corbin to be sworn.

MR. NICOL: Mr. President, I do not appear for Mr. Corbin in this matter, or for any person in particular. I hope the committee will appreciate, as I have no doubt it will, that when this investigation commences, it should be carried to a conclusion as speedily as possible. Of course it goes without saying that any one who presents to the consideration of any assemblage a charge such as is now under consideration, must have been prepared, upon a reasonable notice, to proceed to make good the accusations he makes. That, of course, is the position of the witness who has been subpoenaed. It is needless to say that I, myself, am not prepared to proceed at this time with this investigation. My own information about this matter came to me, so far, that to my mind as an attorney it was necessary for me to inform myself, to the end that I might know that I was justified in representing any person in a case of this character, and the representations and statements to me were sufficient to justify me in believing the truth of the charges made in the accusation. I have no statements at hand this evening. I do not want to delay the action of this committee one moment. I want it to proceed as speedily as is consistent with the gravity and importance of the situation itself. It is not for the purpose of delaying it at all that I make this suggestion: that this committee to-morrow cause to be issued subpoenas for such persons whose names will be handed to the committee, and that the investigation be continued until the evening after to-morrow evening, to the end that we proceed in order, and speedily. My reason for that is that all the statements in this matter are in San Francisco. They are not in my possession. I do not know that I shall appear hereafter as attorney representing any person in this proceeding. Of course it is well known to anybody who knows me at all, that I am not the general attorney for the Continental Building and Loan Association, and necessarily I must defer to the action of the general attorney, who desires to and will be here. I trust the members of the committee will understand and appreciate the reasonableness of this request; it will not delay it, and I am satisfied it will result in more expedition than could be possible by starting it this evening. Mr. Corbin is here and he may be sworn in order that you may direct him to appear here to-morrow, if my action meets the approval of the committee.

SENATOR WRIGHT: Mr. Chairman, I have absolutely no fear of this investigation myself, but we must all admit that those accused are laboring under a very dark cloud, and these people came up here from San Francisco cocked and primed. They are ready and willing to present to a committee or to anybody else the evidence of the truth of the affidavit that Mr. Corbin has sworn to, and yet they come before a com-

mittee which is as hastily formed as this is, and ask for further time. I submit it is not just to myself; it is not just to any other member who is thus accused. I have not come with any attorney to-night. I do not believe that any other person who is accused has come with any attorney. We have absolutely nothing to fear, and so far as I am personally concerned, I have no fear of going to trial before this tribunal, but I do not think it is right to have the matter postponed, and I do not think it is right for the committee to have an attorney upon one side to conduct the investigation, or prosecution, you may say, while on the other side they are willing to submit the case to the tribunal and have this committee investigate fully and fairly themselves, without the aid of counsel, and come to such conclusion as they may deem right. I do not believe that attorneys on either side ought to be tolerated in this matter. We would like a ruling on the matter as to whether attorneys will be tolerated. If there are going to be prosecuting attorneys to make white appear black, so that the "Bulletin" can make a mountain out of a molehill, I think I ought to have some competent attorney who is able to cross-examine and show up the fallacy of their statements.

MR. NICOL: It is just for those reasons that I make those suggestions. Of course it is eminently proper that this Senator and the other Senators named in this affidavit shall not be compelled to appear here or elsewhere unprepared. I want to say in passing that personally and individually I am not anxious to be a prosecutor of anybody, but I appreciate the awful seriousness of this accusation. I appreciate it to that extent that I am surprised that any man can speak coolly of the accusation. My God! What does it mean to those who are accused? That they shall have set at naught the high trust that the people of this State have reposed in them, and drag in the mire the toga about them? Of course it means more to these men than anything in the world. There is no person here making a mountain out of a molehill. The accusation itself is a mountain that overshadows in its magnitude anybody who is touched by that shadow, and it seems to me that any man is on the verge of insanity who would proceed with this investigation without an attorney—who possibly thinks that in speed there is hope—that in undue expedition there may be the means of escaping the condemning testimony. I say, that I view the situation with inexpressible pity—the same pity that has always come to me when I have been compelled to speak of a fellow man and his offenses. I wish to God that to-night I could feel that every one of these men was absolutely clear of the slightest suspicion. I have nothing but the greatest of kindness for him who is in distress. I submit that if we start in in a hurly-burly sort of a way, that necessarily we must get this matter in a confused form. Have these gentlemen had time to take counsel with themselves? Have they had time to go over this matter to ascertain what is best for themselves? Let them be assured to-night that ere this proceeding shall have progressed an hour, when the matters are duly prepared, they will find eminent need of counsel. I suppose this committee desires that. I do not wish to be connected with this proceeding, and I am not here asking to be a prosecutor in this matter. I am quite willing, and, so far as I am personally concerned, I shall be glad if the members of this committee will exclude attorneys as prosecuting attorneys from participation in this proceeding. It is not only from a sense

of justice to the cause that I to-night represent, but with an appreciation of the situation that affects other men, that affects every Senator of the State of California, that affects every constituent of every Senator of the State of California, that I say to-night that it seems to me to be eminently proper that there be a delay taken until the day after to-morrow. Is that long? Surely no harm can come out of that delay, particularly when people who occupy the position of prosecuting witnesses will be here. Of that there is no question. If they would not come voluntarily, this committee has plenary power, under the resolution adopted by the Senate to-day, to bring them here. And if this was an ordinary court, the motion that I make would at once be granted. As I said when I arose first to address the honorable members of the committee, I repeat, that so far as I am personally concerned, this evening will probably end my connection with the matter. Is it not fit and proper that he who was connected with the matter only in the beginning shall cease to be connected with it in the beginning? I think the request is so eminently reasonable and so eminently just that no one who takes account of what is before the committee can question the wisdom of that.

THE CHAIRMAN: Do you think it would be impossible for you to get your witnesses here by to-morrow night?

MR. NICOL: I won't say that, Mr. Chairman. I say the day after to-morrow, because I expect to leave on the train to-morrow to try a case in San Francisco the next day; but the probabilities are that the witnesses can be here to-morrow evening. At least I would undertake to telegraph to the chairman of this committee by not later than 2 o'clock to-morrow afternoon if that is a fact. Mr. Corbin is here, and he can be sworn, in order to return, so there would be no necessity of re-subpoenaing him. He knows that he must be here to the end of the investigation. When he came to the Senate this morning he appreciated that, and he appreciates it now.

THE CHAIRMAN: The idea, Mr. Nicol, is this: That the committee desires to proceed with this matter with all possible haste. They desire to make a thorough investigation. They desire, if the accusation is disproved, to purge the Senators of the charge made against them; if not, whatever else in their judgment seems best, and I agree with Senator Wright. I think that Senator Wright's position is eminently a proper one. They want to have a speedy trial. There are other witnesses, of course, whom the committee will desire to have here, and we desire to have a definite time. So far as I am concerned, I would be perfectly willing to put off the matter of this investigation until to-morrow night, in order to have witnesses here, but I do not like to, speaking for myself alone. I have not yet consulted with the other members of the committee, but I think we ought to have as speedy a trial as possible.

MR. NICOL: I entirely agree with that, Mr. Chairman, and I hope that the suggestion that I made to-night will prevail, and so far as I am concerned, I, too, join in that desire, and I desire that this investigation be conducted speedily and to an end, whereby and through which these men who are accused, if they are guiltless, may be purged; and I ask that arrangements be made so that the matter shall proceed when it shall have been commenced.

THE CHAIRMAN: You understand that this committee is not sitting here as a prosecutor or defender?

MR. NICOL: I understand.

THE CHAIRMAN: But merely as an investigator.

MR. SIMPSON: In view of the statement made by Senator Wright, I move that the committee go on record as according the Senators accused the privilege of being represented by counsel whenever they desire.

MR. DIGGS: Second the motion.

(Motion carried.)

MR. SIMPSON: Mr. Corbin will then be sworn. And we will proceed with the examination of Mr. Corbin as far as we can.

(William Corbin was here sworn.)

MR. SIMPSON: Mr. Corbin, you are the Secretary of the Continental Building and Loan Association?

MR. COPELAND: Mr. Chairman, as I understand the order of the committee, the various Senators who are accused are entitled to counsel. I desire to appear for Senator Emmons. If Mr. Corbin is to be examined, it seems to me that, in justice to the accused, they should have time at least—a reasonable time—to consult with their attorneys, and with each other, and to understand what this is all about.

MR. NICOL: That was one of the reasons, Mr. Chairman, that I made the suggestion.

MR. COPELAND: I am in no position, so far as my knowledge is concerned, to proceed with this matter.

MR. SIMPSON: How much time do you ask for?

MR. COPELAND: I do not ask for any—only a reasonable time. As the chairman of the committee has suggested, to-morrow night; that would be a reasonable time for us to prepare to proceed with this matter. I have only been requested to represent Senator Emmons this evening. Of course these charges were made this afternoon, and were utterly unexpected by these Senators who have been accused. This committee was appointed within one hour after the charges were made. A meeting has taken place within four hours after the committee was appointed, and if we are going to have a trial here, I, as a representative of Senator Emmons, would desire a reasonable time to prepare myself to at least intelligently represent him.

MR. RALSTON: I move you that the further proceedings in this matter be postponed until to-morrow evening at 8 o'clock.

MR. SIMPSON: I understand there is another matter growing out of the work of this committee which will make a postponement desirable; that is the syndicate who were subpoenaed before the Committee on Commissions and Retrenchments, to appear before that committee this evening, and that will give them an opportunity to take up that matter to-night. So I second the motion.

SENATOR FRENCH: I would like to shed a little light on that matter. Senator Emmons, who was to be the questioner in that investigation, is not well, and he is not present, and he cannot proceed in the matter, and if you want to go ahead and do some business, tackle me, and I don't want any lawyer.

THE CHAIRMAN: It has been moved and seconded that further proceedings under this investigation be postponed until to-morrow evening at 8 o'clock in this room, and that all witnesses be instructed to be present at that time. Are you ready for the question?

(Motion carried.)

I desire to have those who wish witnesses subpoenaed for to-morrow night, to leave their names here with us, so that we may issue the subpoenas for their attendance. I understand that there are several witnesses who will come without subpoenas. Mr. Robert, I understand, is on his way here now, expecting to be here to-night, and I am very sorry indeed that he left his business.

MR. AL. MURPHY: Mr. Chairman, it was at your request that I telegraphed him to come up to-night, and you said you would hear his testimony to-night or to-morrow morning.

THE CHAIRMAN: That is what I did say.

MR. MURPHY: Will you hear it to-morrow morning?

THE CHAIRMAN: I said to Mr. Murphy that if Mr. Robert would come up to-night, we would hear him to-night or to-morrow morning. He is a very busy man.

MR. MURPHY: There has been no subpoena served, then?

THE CHAIRMAN: There has been no subpoena served.

MR. MURPHY: He is on the train and he is coming right from the train to this room, and you said to me that you would hear him.

THE CHAIRMAN: Yes, sir.

MR. NICOL: We shall subpoena Mr. Robert and ask the committee to subpoena him, so whether he testifies to-night or not, he will have to return. We shall certainly have Mr. Robert here under a subpoena.

MR. MURPHY: I want to say he will be at the disposition of the committee at any time.

THE CHAIRMAN: I am very sorry to have discommoded him, but I did not know what course the investigation was going to take. It is understood that all persons interested in this investigation will have the same rights before the committee to have witnesses subpoenaed—the Senators who are accused as well as the gentleman who has filed the affidavit, or any other person interested in the investigation—and we would like to have them leave the names here to-night of the witnesses that they desire to have subpoenaed, in order that this investigation may proceed as rapidly as possible.

MR. NICHOLS: I shall be compelled to ask an indulgence until to-morrow evening on that score, and to-morrow evening we shall endeavor to have such a number of witnesses here as I am satisfied will take up the entire session.

SENATOR KEANE: Mr. Chairman and Gentlemen of the Committee, I desire to state on behalf of Mayor Schmitz of San Francisco, who has been named in the affidavit, that upon his being notified by telegram this evening that the committee was appointed and would proceed with the investigation, he stated he would willingly attend the meeting of the committee and proceed here at once, and if the committee will adjourn until to-morrow he will be here without the necessity of any process.

THE CHAIRMAN: The committee stands adjourned until to-morrow evening at 8 o'clock.

An adjournment was taken until Tuesday, January 31, 1905, at 8 P. M.

SECOND SESSION.

ROOM 16, CAPITOL BUILDING,
TUESDAY, January 31, 1905, 8 P. M.

THE CHAIRMAN: The committee will come to order. Owing to the inadequacy of this apartment here, if there is no objection on the part of the committee we will adjourn to the Senate Chamber to conduct the investigation. There is no objection. It is so ordered.

(Here an adjournment was taken to the Senate Chamber.)

THE CHAIRMAN: The committee will please come to order. Is Mr. Corbin present?

TESTIMONY OF WILLIAM CORBIN.

Recalled.

MR. SIMPSON: Q. Mr. Corbin, have you an attorney who will present the charges set forth in your affidavit? A. Yes, sir.

Q. I understood that Mr. Nicol would not represent you? A. Mr. Gould and Mr. McNab will both represent me.

MR. SIMPSON: Gentlemen, at the meeting of the committee last night it was decided that any of the attorneys representing any of the gentlemen, especially Mr. Corbin who brings this charge, would be given opportunity to bring out facts on which they base the charges, and the committee would prefer to have it done that way, so it would not appear in any way that the committee was prosecuting in the matter. Mr. Corbin has been sworn, and we would ask you to take up the matter in the affidavit, and bring that out for the benefit of the committee.

MR. GOULD: I suppose, as far as the committee is concerned, it will be permissible for counsel to bring in the facts in the natural sequence by such witnesses as will establish those facts.

MR. SIMPSON: That is the idea.

MR. GOULD: And the fact that Mr. Corbin is called at this time does not necessarily infer that he is to be the first witness?

MR. SIMPSON: No. The committee will expect Mr. Corbin to be called during the investigation.

MR. McNAB: He is not very well this evening, and we could put on other witnesses who would lay the foundation, and we would like to make it in its natural course consecutively.

MR. SIMPSON: I would like to know if there are any attorneys present representing any of the four Senators, who are more concerned in this than anybody else. Mr. Copeland, I believe, represents Senator Emmons.

MR. COPELAND: Yes, sir. Mr. Cator, Mr. Alexander, Mr. Jacobs and myself represent the parties here accused, but before proceeding in this matter we would like to know for our own information from the committee as to whether or not the examination will be conducted upon technical

legal lines or whether it will be a liberal examination. So far as we are concerned, we are not in favor of conducting this investigation upon strictly legal rules, but upon such rules as this committee sees fit to adopt as we go along. We are here accused, and we are here to answer to any accusation that may be placed against us, and we ask and expect and are confident that we shall have the most liberal of treatment so far as the testimony is concerned from this committee.

MR. SIMPSON: That, I believe, was the rule established by the committee last evening. We will not be bound by the strict rules of evidence in this investigation, and will only require a reasonable relevancy to the matter under investigation.

MR. COPELAND: Mr. Chairman, before proceeding in this matter further, it would occur to me that inasmuch as Mr. Corbin has been sworn and is here, he has signed and sworn to this affidavit, it would occur to me that in all fairness he, being the indicter of these Senators, should be examined before any other witnesses are examined. We think that that is fair. We are not here looking for any traps, but we are here asking for fair treatment. We think, inasmuch as Mr. Corbin is here on the witness stand—he has been sworn—it is our right to have him examined here, and at once tell us upon what he bases these charges.

THE CHAIRMAN: Is there any objection on the part of Mr. Corbin to testifying at the present time?

MR. McNAB: We have brought one witness here who is the foundation of this matter, and whom it has been very difficult to get here. He has very urgent business arrangements, and Mr. Corbin has not been well to-day, and we would rather put one witness on first so as to dispose of his testimony, so he can return to San Francisco, because it is of very great inconvenience for him to be here. After that, then we have no objection to Mr. Corbin testifying.

MR. COPELAND: Who is this witness, Mr. McNab?

MR. McNAB: The first witness. It is the first incident connected with this matter.

MR. SIMPSON: I do not see how we can make any rule as to the order of witnesses in this matter.

MR. McNAB: We wish to present our case, if your honorable Senators will permit us, just as we would present it in court. We are here to prove facts, and prove them exactly as we would in any court.

MR. ROWELL: We would like to have Mr. Corbin swear to the affidavit.

MR. McNAB: It is already sworn to.

MR. COPELAND: Would the committee allow me to examine the affidavit, the original affidavit?

THE CHAIRMAN: It is in the minutes.

MR. SIMPSON: The stenographer has a copy.

(Copy of the affidavit is handed by the stenographer to Mr. Simpson.)

MR. COPELAND: Is that a correct copy?

THE CHAIRMAN: This is a certified copy—certified by the Secretary of the Senate.

THE CHAIRMAN: Is there any objection on the part of any—

MR. COPELAND (interrupting): We would like to suggest, in accordance with the suggestion of Senator Simpson, that before proceeding in this matter Mr. Corbin swear to this accusation before this committee. This accusation was sworn to in the City and County of San Fran-

cisco before any charges were formally filed in this proceeding. I do not think that any prosecution for perjury could be based upon this affidavit.

MR. McNAB: He will testify in his regular order afterwards, and you can cross-question him on this affidavit.

MR. COPELAND: I do not suppose you have any objection to his swearing to that affidavit?

MR. McNAB: I do not know. I did not prepare it, and the attorney who did prepare it is not here.

MR. COPELAND: These charges are based on that affidavit, as I understand it?

THE CHAIRMAN: That is right.

MR. SIMPSON: This affidavit is an informal document, and it is sworn to, and it is the basis of any kind of a rumor. If there was a rumor the Senate could appoint an investigating committee. It is my view, if Mr. Corbin at some time takes the stand, it will be satisfactory if the committee questions him as to the statements contained in that affidavit.

MR. ROWELL: Let him swear to the affidavit now.

MR. RALSTON: Let him swear to the affidavit now.

MR. SIMPSON: I do not think we can compel Mr. Corbin to take the stand at this time, because then we regulate the order of proof.

MR. GOULD: This has been presented as an affidavit. It has been sworn to. It is a sworn statement of Mr. Corbin. I presume that Mr. Corbin comes before this committee as he would come before any other committee. He has presented his affidavit, sworn to before a notary public in the City and County of San Francisco, and I fail to see that his swearing to it at this time before this committee would add anything to it. We would like to present this case in a consecutive way, as we would present a case in court. I think we have that right, and we think that the authority upon which this committee acts is solely the resolution which was adopted by the Senate by which this committee was appointed. The cause of that resolution undoubtedly was the affidavit filed by Mr. Corbin. When he comes here to sustain the charge he has made, I think he has a right to sustain that in such manner as your honorable Senators will permit, and at the same time in accordance with his best views, he being more familiar with the testimony than the Senators are.

THE CHAIRMAN: Mr. McNab, call your witnesses.

TESTIMONY OF CLARENCE GRANGE.

Sworn.

MR. McNAB: Q. Where do you live? A. In San Francisco.

Q. What part of San Francisco? A. 2315 Broadway.

Q. What is your occupation? A. I am Secretary and Managing Director of the Phoenix Building, Savings, and Loan Association.

Q. How long have you lived in San Francisco? A. Five years.

Q. Has your occupation during that five years been all the time what it is now? A. Yes, sir.

Q. Do you know one Joseph Jordan? A. Yes, sir.

Q. Did you on Sunday, a week ago—a week ago last Sunday, I mean; I am not sure of the date—see Joseph Jordan? A. Yes, sir.

Q. Where did you see him? A. At my residence, 2315 Broadway.

Q. Under what circumstances? A. Mr. Jordan called to see me as a go-between the—as an emissary of certain Senators, constituting the members of the Committee of Commissions and Retrenchments, for the purpose of securing a money consideration from me——

MR. COPELAND (interrupting): The committee will excuse me. Suppose you repeat the conversation you had with Mr. Jordan; would not that be the best way?

MR. McNAB: We will take it up that way. Q. When and where did you see him on that Sunday? A. The first time was on Saturday.

MR. McNAB: Is there a calendar here so that I may see the exact date? (Calendar is handed to the witness.)

Q. I will ask you if you saw Mr. Jordan on Saturday, the 21st day of January? A. I saw him last Saturday week, whatever date that was.

Q. A week ago last Saturday? A. Yes, sir.

Q. Where did you see him? A. At my residence, 2315 Broadway.

Q. Did he call there? A. He did.

Q. What conversation occurred between you and Mr. Jordan at that place and at that time? A. Mr. Jordan informed me that——

MR. COPELAND (interrupting): We would like to have the witness give the conversation, if the committee please. I think that is fair.

MR. McNAB: Q. State the conversation according to your memory—the exact words, as nearly as they occur to you, that happened between you and Mr. Jordan at that time and that place? A. After exchanging with Mr. Jordan the compliments of the day, Mr. Jordan informed me that there was hell a-popping over in Sacramento, that the Committee on Commissions and Retrenchments had six subpoenas out, and they intended to subpoena what is known as the Big Four in San Francisco—the four big companies—and that a meeting was to be held at which an investigation was to be had on the Tuesday following; that the committee was open for business.

THE CHAIRMAN: The Committee on Commissions and Retrenchments? A. The Committee on Retrenchments was open for business, and he wanted to know if I wanted to do any business with them—if I wanted to pay anything for immunity. I told him no, I did not wish to pay anything for immunity; that I did not care anything about their investigation; that they could investigate as long as they pleased and as much as they pleased; that my corporation had nothing to conceal. Anyway, I said I would not take any steps in the matter unless it was done by consent of the managers of the different companies in San Francisco; before I could go to the managers and tell them anything I must have a definite promise from the committee; that it would be no use of my going and suggesting anything to the managers without a definite proposition. Furthermore, I said to him: "Nothing can be done by Tuesday, because the time is too short." He said, "Very well, I will see what Mr. Bunkers has to say, and Mr. French, and report to you on to-morrow, Sunday." He made an engagement to see me at not later than 2 o'clock in the afternoon. I remained in all day awaiting him. At 2 o'clock he called, and wanted to know what the verdict was. I said, "What is the proposition?" "Well," he said, "they want you to say." I said, "Oh, no; I don't say anything." "Well," he says, "I think that three of the companies can be included, but the Continental

cannot be included without big money." He says, "Bunkers claims it is going to take big money to fix the Continental on account of the 'Examiner.'" I says, "You had better see your people again, and get something definite." He said, "All right; they are waiting at Eighth and Market streets, and I am to meet them at 3 o'clock." He left my house and returned about 6 o'clock in the afternoon or evening. He said, "I can fix the thing for \$2,000, and my commissions to be above that." I says, "How much do you want?" "I want at least \$250." "Well," says I, "I don't know; we will see about that. What do they want from the Continental?" He says, "They want \$10,000 from the Continental, in addition to my commissions." He says, "I asked Bunkers if there was anything out of that \$10,000 for me, and he said no, that there were four of them in the committee that had to be provided for, and they would not move a peg for less than \$2,500 apiece, because if they did, they would be dogged by the 'Examiner,' and besides," he said, "that Mr. Emmons expected to obtain evidence in the examination of the Continental, and as a result of the examination, to bring—to get out a warrant for the arrest of Washington Dodge and Gavin McNab for compounding a felony." "Well," I says, "I do not care anything about the Continental anyway; it is nothing to me." I then said to him that I would let him know by wire what could be done, and if anything could be done that I would probably come to Sacramento to make the arrangements with him—complete them. It was understood and agreed that all communications should be signed Bill Newell. After he left I went to Mr. McNab's office, and I arranged with Mr. McNab the trap that the money should be sent in some way to Mr. Jordan, and the evidence secured, because I did not propose to be blackmailed. Is there anything else?

MR. McNAB: Q. Did you have any communication with Mr. Jordan the next day in Sacramento? A. Yes, sir.

Q. What was that communication? A. I sent Mr. Jordan a telegram, telling him to call me up over the 'phone at some hour in the afternoon—I think it was 5 o'clock; it may have been earlier. I do not recollect the exact hour. He called me up over the 'phone.

Q. One moment, please. What were the contents of that telegram?

MR. COPELAND: Have you a copy of it?

MR. McNAB: Q. I will ask you to whom was that telegram addressed? A. That telegram was addressed to Jordan.

Q. Are you sure you had the right name? A. The name in the telegram was Joseph or Frank, because I was under the impression that his name was Frank.

MR. COPELAND: Excuse me, Mr. Witness. We object to the contents of that telegram. We demand the telegram.

MR. McNAB: I am not offering the contents.

MR. COPELAND: You asked him what was in it.

MR. McNAB: I am not asking for the contents of the telegram; you can get that from the company.

MR. COPELAND: Very well.

THE WITNESS: The telegram was addressed to Frank S. Jordan or Joe S. Jordan (I do not remember which), care of the Senate Chamber. I have addressed him both ways.

MR. McNAB: Q. Did that produce a reply from him? A. It produced a telephone reply.

Q. At what time? A. In the evening, as near as I can recollect, in the neighborhood of 4 or 5 o'clock.

Q. What was the communication by telephone between you and Mr. Jordan? A. I told him that there was some change in the programme, that I could not come to Sacramento; asked him where he lived. He told me at 1116 Seventh street, and I told him that Bill Newell would call upon him and make all final arrangements.

Q. What did he say to that in answer to you? A. "All right."

Q. What did you do further as to receiving any money in this matter? A. Going back. On Saturday evening after Jordan called on me, I called up Mr. George Perrine of the Renters' Association and told him that it was necessary that I should see him, and see him right away. He requested me to meet him at the residence of Mr. J. H. Mallett on Webster street, near Jackson. I went there. I laid the communication of Mr. Jordan before those two gentlemen, and they agreed with me that we should do nothing. On Monday morning I went to Mr. Perrine. I said to Mr. Perrine, "I have made arrangements for the money to be delivered, if it is put up before witnesses and the evidence will be obtained. Do not ask me too many questions, but tell me if you are in with me to stop grafting." He said, "Yes, I am in for that purpose," and he furnished half the money; I furnished the other half.

Q. What did you do with that money? A. I took the money, and counted \$350 in four different envelopes, \$150 in a fifth envelope, and delivered it to some person unknown to me in the rotunda of the Mills building.

Q. Was it a man that I described to you? A. Yes, sir; you nodded to me, and showed me the man to whom I was to deliver the money.

THE CHAIRMAN: Q. The total amount of money then was \$1,550? A. \$1,550; one hundred went on afterwards.

MR. McNAB: Q. You have stated that the first arrangement was to be \$500 with Mr. Jordan per Senator—— A. (Interrupting.) No, he said he must have \$250.

Q. For himself? A. For himself.

Q. And \$500 for each Senator? A. And \$500 for each Senator.

Q. How did you come to alter the arrangements, to make it \$350? A. Because I expected the three associations would join with me, and when it was decided they would not do it, Mr. —, the matter was submitted to Mr. Bush of the Pacific States, and he would not have anything to do with it. I did not detail to Mr. Bush what was wanted—simply laid the facts before him, and I did not ask Mr. Bush to join in the trap. When I asked Perrine to join in the trap, we decided that as only two companies were to be referred to, that in all probability it would answer just as well to give them the amount that we did give them, and save the balance of the money, because the money would be gone after we gave it up.

Q. Did you afterwards add a hundred dollars to that sum? A. I afterwards added a hundred dollars to the sum.

Q. How was that? A. The \$100 was in twenty-dollar gold pieces in an envelope, pinned inside of a newspaper, delivered to the same party in the rotunda of the Mills Building in San Francisco.

Q. Have you since the 23d day of January met Mr. Jordan? A. I have.

Q. Where and when did you meet him? A. I met Mr. Jordan last Friday and last Saturday—last Friday in San Francisco—or last Friday in Sacramento at the Capital Hotel, and I asked him how things were. He says, "There is trouble." He says, "Mr. Bunkers only got \$300." He says, "I saw the money counted out, and it was done up in packages. I delivered the money myself, but," he says, "some way or another \$50 got out of Bunkers' package. Now he wants that \$50 or he is going to make trouble." On Saturday he came to my office in San Francisco, and again referred to the \$50. I said, "Tell Bunkers to wait a week."

Q. Did you have any communication by telephone or otherwise from Mr. Jordan again? A. Yes, sir.

Q. When? A. On Monday, after the matter was brought before the Senate.

Q. What communication did you have with him, and how did you have it? A. He asked me if I had seen the "Bulletin," and wanted to know if I was coming up here. I told him I had not seen the "Bulletin," and to call me up in half an hour, and I would send out and get one. I sent out and got a "Bulletin." He telephoned me again, and said, "Are you coming up here?" I said, "No." He said, "Is my name in the 'Bulletin,'" and I said, "No."

MR. McNAB: That is all, gentlemen.

THE CHAIRMAN: I believe you testified that Mr. Jordan came to you as an emissary of the four Senators? A. So he claimed.

Q. Just so he claimed? A. Yes, sir.

Q. Did he bring you any document or visible evidence that he was the emissary of the Senators? A. The only evidence he brought me was the fact that there appeared in the "Post" the statement that the meeting for investigation of the building and loan associations was to be held on Tuesday, and he gave me the assurance that the meeting would go over until Wednesday, and it went over.

MR. McNAB: I might ask one question I omitted?

THE CHAIRMAN: Certainly.

MR. McNAB: Q. Mr. Grange, did he state what was to be done for you, and any other company contributing money to the committee? A. He said we would not have to come up unless we desired to, and if we did come up we could dictate our own reports.

THE CHAIRMAN: Q. What companies were the Big Four? A. The Continental Building and Loan, the Renters', the Pacific States, and the Phoenix.

THE CHAIRMAN: Do you desire to cross-examine?

MR. COPELAND: Yes.

Cross-Examination.

MR. COPELAND: Q. Mr. Grange, what is your company? What is the name of your company? A. Phoenix Savings, Building, and Loan Association.

Q. You are the manager? A. I am the manager; yes, sir.

Q. How long have you known Mr. Jordan? A. I have know him for some time—just how long I do not know. He used to solicit advertisements for me, and later on used to write ads for me.

Q. Did you know him very well? A. Simply he wrote ads for me, for which I paid him.

Q. Never was in your employ? A. To that extent, yes.

Q. You paid him money, and he rendered you services? A. Yes, sir.

Q. To that extent you knew him. You do not remember how long you knew him? A. Well, he has been writing ads for me since, I think, February of this year; and I think perhaps I have known him—I knew him a year previous to that.

MR. GOULD: I suppose you mean February of last year?

MR. COPELAND: Q. A year ago this February, or two years ago this February? A. I think I have probably known him for two years.

Q. All of the time in the city and county of San Francisco? A. Yes, sir.

Q. Do you know what occupation he was in when he came to you on the occasion that you have mentioned here? A. He told me that he was secretary of the San Francisco Delegation, and representing the "Post."

Q. That he was a newspaper man, in other words? A. Yes, sir.

Q. When he spoke to you, did you have any personal acquaintance with Mr. Emmons or Mr. Wright? A. Never saw them in my life—would not know them if I would see them now.

Q. Or Mr. French, or Mr. Bunkers? A. Never saw them, sir.

Q. Did not know these gentlemen at all? A. Do not know them now.

Q. Did you know whether Mr Jordan knew them? A. Did I know he knew them?

Q. Yes; of your own knowledge? A. No, sir; I did not.

Q. Had you any information on the subject? A. Nothing but his own statement.

Q. You just took his word for it? A. Yes, sir.

Q. Then you went to see Mr. McNab about it? A. Yes, sir.

Q. What did Mr. McNab say? A. In what regard please?

Q. Why, about this matter of your raising this money to be used in the way in which you have testified? A. Mr. McNab and I discussed the proposition and—

Q. (Interrupting.) What did you say to Mr. McNab? A. What did I say to Mr. McNab?

Q. Yes. A. I asked Mr. McNab what he thought of the affair, and he expressed his opinion in language reasonably forcible, and he said that the money should be paid to them, but should be paid—

Q. (Interrupting.) Should be paid to whom? A. Should be paid to these Senators in the presence of witnesses, so that we could catch them as a result of their attempted graft.

Q. Well, did he say anything about—did you repeat to Mr. McNab the conversation that you had with Mr. Jordan? A. I did.

Q. Did you repeat to him the fact that Mr. Jordan had told you that if this money was not paid that this committee or this Senate, or whatever it was that he was holding over you, would be used against Mr. McNab— A. I did.

Q. —by the "Examiner"? What did Mr. McNab say about that? Just repeat it as near as you can? A. Mr. McNab said he did not care what the "Examiner" did.

Q. Anything else? A. In respect to the "Examiner"?

Q. Yes. A. No.

Q. Nothing else in relation to the "Examiner." Did he express himself as to his opinion about the "Examiner," and the way that they had treated him? A. It is possible he may have; I do not recollect.

Q. Just think a minute. Now, didn't he? A. I have no recollection of his doing so.

Q. Well, what did he say, as near as you can recollect? A. He said he did not care a continental for the "Examiner" or anything that they might do.

Q. Then what did he say? A. The discussion then came as to how we should get this money into the hands of these Senators, and have proof of it, and I suggested to Mr. McNab that Mr. Tichenor, who had been formerly the assistant superintendent of the Pinkerton Agency, be employed for that purpose. Mr. McNab says, "He is the very man;" and he says, "I will attend to it." The balance of it he attended to.

Q. Before you had had this conversation with Mr. Jordan, had you ever discussed this matter with Mr. McNab? A. No.

Q. Never had mentioned it to him? A. Do you mean in reference to Jordan?

Q. No, not in reference to Jordan, but in reference to anything with reference to entrapping these Senators in this matter? A. No, not prior to this time.

Q. Not prior to that? A. Because I did not know that the Senators were going to lay themselves liable to be trapped.

Q. You did not know, you mean, that Mr. Jordan was coming to see you? A. Exactly.

Q. Did Mr. Jordan say anything about Mr. Emmons or Mr. Wright in connection with this matter? A. He spoke of Mr. Emmons, Mr. French, Mr. Bunkers, and said he was not sure who the fourth man was, because his dealings were with Bunkers and French.

Q. Then he did not pretend at that time to be the agent of Emmons and Wright? A. No, excepting through Bunkers and French.

Q. Not their direct agent? A. Not their direct agent.

Q. You did not so understand at that time? A. I understood that the negotiations—that he was sent to me by Mr. Bunkers, and by Mr. French, as their representative.

Q. What is the title of the corporation that you are the manager of; I did not quite get that? A. Phoenix Savings, Building, and Loan Association.

Q. What is the nature of that association? A. It does a building and loan business.

Q. How long have you been engaged in that business? A. In the building and loan business?

Q. Yes, with this corporation? A. Ever since the corporation has been doing business as the Phoenix Association—for about four years and a half.

Q. And previous to that time, were you engaged in that business? A. I have been in this same business, sir, for over sixteen years.

Q. Is there anything wrong about that business? A. No, sir.

Q. Have you ever since you have been engaged in that business found it necessary to pay anybody any money to influence legislation in matters connected with it? A. I never paid anybody any money; no, sir.

Q. Have you ever known any one else to do so? A. Of my own knowledge, no, sir.

Q. Do you know of any reason why any one should do such a thing as that? A. No, sir.

Q. Why did you get so busy then about this if you did not think that there was any necessity for any one paying any money?—why did you dally with this matter? A. I am very glad you ask me the question.

Q. Yes, I would like to know. A. There was a bill which was introduced in the Assembly known as Assembly Bill No. 75, and I said that I was going to oppose that bill, because I considered it a bad bill, and I have been frequently approached, and so stated before the Committee on Building and Loan Associations of the Assembly last Friday night that I had been threatened by the Committee on Commissions and Retrenchments with paid advertisements, with attacks from the "Examiner," and all sorts of horrors if I dared to present myself in Sacramento to oppose the passage of Assembly Bill No. 75.

Q. Now, who threatened you with any bodily harm if you appeared here before any committee of either the Senate or Assembly? A. Mr. Frank Otis, President of the Local League, in his office.

Q. In San Francisco? A. Yes, sir.

MR. McNAB: Q. One moment. Did you say bodily harm? A. I did not say bodily harm.

MR. COPELAND: Q. You said all sorts of dire results; what did you mean by that? A. What did I mean?

Q. Yes, sir. A. I meant that there would be attacks made upon my corporation—not upon me personally, if I attempted to oppose the passage of that bill.

Q. Go on now about Mr. Otis. What did Mr. Otis say to you. Just repeat the conversation? A. Mr. Otis said a great many things.

MR. GOULD: I would like to suggest at this time, while we have no objection to it coming out, that if latitude of this kind is allowed, the committee should censure it.

MR. COPELAND: I do not think so. I want to find out what the animus of this charge is; how it was brought about.

THE CHAIRMAN: It is the desire of the committee to be as liberal as possible, but we want to arrive at a conclusion as rapidly as possible.

MR. COPELAND: I understand that, Senator, and I desire to comply with the desires of the committee, instead of to drag, or anything of that kind. Of course, as this committee undoubtedly knows, even though the majority are not lawyers, most all of the testimony that has been introduced here by the prosecution, you may call it, so far would be entirely inadmissible in a court of law. We have not objected to that. We are attempting to arrive as near as may be at the truth of this matter, and as quickly as possible. I do not care to wrangle with Mr. Gould, and with Mr. McNab about this matter at all. I will submit to any ruling that the committee sees fit to make, and will do so gracefully. All that I want is to investigate, as near as may be, the causes and the animus which has led to these charges. I think in justice to these Senators it ought to be done. We have a right to inquire in any court of law as to the motives and animus of any witness who is against us, and in order to lay this thing bare, as we go along, I propose so far as the committee will allow me to do it, in all earnestness, in behalf of my client, to show that animus as we go along. This witness is entirely out of order. They have laid no foundation for his tes-

timony, but the committee has seen fit to allow him to testify, and we have not objected to that, but in any event I believe it would be admissible for us to go into the animus and the motives that govern this witness in his testimony, whatever it may be.

THE CHAIRMAN: There is no objection on the part of the committee. Proceed.

MR. COPELAND: What is the question, Mr. Reporter?

(Last question read.)

A. As near as I can recollect, the conversation as to that matter was that if I opposed this bill that I might be investigated by a legislative committee, and that, if necessary, advertisements attacking the association would appear in the papers.

Q. Who is Mr. Frank Otis? A. He is an attorney.

Q. Whom does he represent? A. He represents the League of Local Associations.

Q. What League of Local Associations does he represent; what kind of associations? A. The small associations confining their business to the county in which they are located, or adjacent or adjoining counties.

THE CHAIRMAN: Q. You mean building and loan associations? A. Yes, sir.

Q. Are they antagonistic to you in any way? A. Yes, sir.

Q. In what way are they antagonistic to you? A. Because they are gradually losing ground, and our associations are gaining ground.

Q. What do they desire to do to you; what is the proposition; have you any reason to advance why he should make these threats toward you; what motive did he have? A. Simply the motive to carry out his ends, I presume.

Q. What did you conceive to be his ends? A. To legislate us out of business.

Q. You mean to injure your business? A. Yes, sir.

MR. COPELAND: I have not that bill with me, but I would like to have that bill.

Q. Is that Assembly Bill No. 75? A. Assembly Bill No. 75.

THE CHAIRMAN: Do you care to go into that bill?

MR. COPELAND: I do not know what the bill was. I might.

MR. ROWELL: We want to get at the facts.

MR. SIMPSON: Q. You and Mr. Otis differed as to this proposed law? A. Yes, sir.

Q. And one believes that it would injure his business if it went through, and the other believes that it would improve his business if it did not go through? A. Yes, sir.

Q. Is that the idea? A. Yes, sir.

Q. You differ on the policy of this bill? A. Yes, sir.

Q. And your discussions and differences cause ill feeling? A. Somewhat acrimonious.

MR. COPELAND: The only object I wanted to see the bill was where the bill came in—what this was all about; whether this was a private feud between the secretaries of the building and loan associations, or whether this was something that affected the people of this State.

THE CHAIRMAN: I do not think it would be advantageous to your case to discuss that bill here at present. I think you have established that there was some feeling between Mr. Otis and Mr. Grange on account of the introduction of this bill, Mr. Otis representing one kind

of building and loan association, as I understand it, and Mr. Grange another kind of building and loan association.

THE WITNESS: Yes, sir.

THE CHAIRMAN: For the purposes of this investigation, it seems to me that it would not be necessary to introduce that bill, and discuss it here. We will probably have to discuss it on the Senate floor, if it gets there.

MR. COPELAND: I think you are right. I wanted to establish the fact that there was an animus between these different schemes of building and loan associations in which the people have some interest.

THE CHAIRMAN: I think the witness will admit that.

THE WITNESS: I am trying to take the side of the people in this bill.

MR. COPELAND: That is the way with all building and loan associations usually; I know that.

THE CHAIRMAN: Proceed, Mr. Copeland.

MR. COPELAND (to the Chairman): This witness is a new witness to us. There are other counsel engaged in this case, all earnestly and conscientiously, and if the committee could indulge us to retire for five minutes to see whether or not the other counsel would want to ask him any question, it would be a favor to us.

MR. McNAB: I would like to ask, before they retire, that I be permitted to ask a question that I omitted in the direct, so that they might have all their cross-examination on the same surface?

MR. COPELAND: Certainly.

THE CHAIRMAN: Yes, sir.

MR. McNAB: Q. Did Mr. Jordan say anything to you about subpoenas that were issued by the committee? A. I testified he said there were six subpoenas issued.

MR. McNAB: I had not observed that. I did not know.

MR. COPELAND: Yes, that was asked.

MR. McNAB: Q. Did he say for whom they were issued? A. Told me they were issued for the Big Four, and two other associations he did not know the name of—one was the Pacific something, but he did not know what Pacific it was.

MR. SIMPSON: So that the record may be straight, you spoke of other attorneys, Mr. Copeland? Up to the present time you are the only attorney who has entered appearance. Who are the other attorneys?

MR. COPELAND: Mr. Cator, Mr. Jacobs, and Mr. Alexander are the attorneys.

MR. SIMPSON: Do they appear for all four of the Senators?

MR. COPELAND: Yes, sir; at the present time.

Q. I will ask the witness one or two questions on the subpoena. Mr. Grange, is there anything, in your mind, dangerous to your business or to your personal relations, or to anybody that you know of, in the Legislature of this State issuing subpoenas for the attendance of witnesses to investigate building and loan associations in Sacramento? Did that strike you as anything illegal? A. I thought it was a very good plan, sir.

Q. It did not frighten you in the least? A. Not a bit.

Q. And you did not pretend that it did? A. No, sir.

Q. And you did not pretend it made any difference to you? A. It made no difference to me in the world.

Q. And in all your conversations with Mr. Jordan, there was nothing in your manner or in your words to suggest that you had any fear

whatever of anything that this Legislature would do? A. I have no fear whatever of anything this Legislature will do.

Q. You did not lead Mr. Jordan to think that you had? A. I do not think I led Mr. Jordan to think anything of the kind. I do not think I said anything to Mr. Jordan that could have caused me to have any such idea.

(Here a recess was taken for five minutes.)

(After recess.)

MR. McNAB: I think there is one question that I did not make quite clear, and I think in the interest of the investigation it should be asked again, even if it was answered.

Q. In your conversation with Mr. Jordan—your conversations testified to in Sacramento, and your conversation in San Francisco subsequent to the 23d day of January, 1905, did he tell you that these four gentlemen had received this money? A. He told me that he had delivered the money to Senators Bunkers, French, Emmons and Wright.

MR. CATOR: Q. But he claimed that Bunkers was \$50 short? A. Yes, sir.

Q. Is that all the conversation you had with him on the subject in Sacramento? A. I think I testified to the whole conversation as I recollect it now.

Q. And where was this last statement made to you in Sacramento; at what place? A. At the Captital Hotel, room 64.

Q. How came you to meet him at that place? A. I telegraphed him to meet me there. He was collecting some bills for me, and had the bills put out, so he said, and I was going to appear before the Committee on Building and Loan Associations that night in the Assembly, and I had to have the bills to prepare my argument, as I had never seen the bills at that time—never seen the bill that was introduced—simply a copy of the bill that was to be introduced.

Q. Mr. Grange, you have spoken of meeting Mr. McNab in his office; on what day was that with reference to Sunday that you first met Mr. Jordan? A. The same day.

Q. On Sunday? A. Yes, sir.

Q. How did you know he would be there? A. Because I sent a message to Mr. McNab that I wanted to see him, and he telephoned me, and then I told him I would see him later in the day, and he telephoned me again, and I said I was not prepared to meet him yet, and I made an appointment to meet him in his office at 8 o'clock that night.

Q. How soon after Jordan first spoke to you at your house on Sunday did you communicate with Mr. McNab? A. I think I communicated with Mr. McNab about 4 o'clock the second time.

Q. That is the second time you communicated with him? A. Yes, sir.

Q. How soon after you first met Jordan, after Jordan went away the first time on Sunday, did you communicate with Mr. McNab? A. I got in communication with Mr. McNab on Sunday morning.

Q. That was before Jordan saw you? A. That was after Jordan called on me, because he called on me Saturday night.

Q. He called on you the Saturday night before? A. Yes, sir.

Q. What did Mr. McNab know in regard to his having called Saturday night? A. I told him that I had been approached, but I did not care to discuss any matters over the 'phone, and I wanted to see him.

Q. You had not previously spoken of this Saturday meeting. Are you sure that Saturday night was the first time that Jordan met you? A. I have testified in my testimony here that Jordan called on me at my house on Saturday night. I am positive I so testified.

Q. Perhaps I am mistaken. After Jordan went away on Saturday night, you communicated with Mr. McNab? A. I tried to reach Mr. McNab, but I could not reach him.

Q. Where did you try to reach him? A. At the hotel.

Q. Why did you try to reach him? A. Because I wanted to communicate to him the fact that I had been approached.

Q. By Mr. Jordan? A. By Mr. Jordan.

Q. Why did you want to communicate with Mr. McNab? A. Mr. McNab is my counsel, and therefore I thought it was proper for me to communicate with him.

Q. Had there not been previous talks between you and Mr. McNab on the subject before that? A. Of Senatorial bribes; no, sir.

Q. In regard to the question of this Committee on Commissions and Retrenchments? A. No, sir.

Q. You and him had never spoken in regard to these Senators before? A. No, sir.

Q. Their names had never been mentioned? A. No, sir.

Q. Prior to that? A. No, sir.

Q. Between you and Mr. McNab? A. No, sir.

Q. Or between you and any other person? A. Between myself and any other person—of that I am not so positive about.

Q. If you are not positive in regard to it, what is your best recollection in regard to your talking about these Senators with any one else than Mr. McNab before that Saturday evening? A. I do not think that I discussed the animus of any Senators. I discussed the committee, their proposed action, because it was newspaper talk, and because as I said that I had been threatened with the committee.

Q. Were these persons, if you did speak to any others, persons connected with the Continental Building and Loan Association? A. No, sir.

Q. What? A. No, sir.

Q. When you spoke to Mr. McNab first what did you say to him about Jordan's visit? A. I think I recited to him the facts that I have recited to this committee.

Q. Was there anything said between you and him then in regard to some method of entrapping these Senators? A. That the money should be paid to the Senators in the presence of witnesses.

Q. What money? A. What money?

Q. Yes. A. Any money that they would accept—the \$2,500, or \$2,200 or \$2,250 that was wanted.

Q. Did you repeat to him the conversation in regard to \$10,000 being wanted from the Continental? A. I did.

Q. What did he say in regard to that? A. He said the Continental would not put up a dollar.

Q. Did he suggest that you have other people put up money for the purpose of being paid into the hands of the Senators by a method that would be agreed upon? A. I do not know that he suggested that. I was very anxious to do it myself, because I felt if there was any blackmail going on, that the time for blackmailing should stop.

Q. Are you sure he did not suggest it? A. I am very sure he did not suggest it.

Q. Did anybody ever suggest it to you? A. No, sir.

Q. Then this idea originated wholly in your mind? A. Yes, sir.

Q. What? A. Yes, sir.

Q. When did it originate in your mind? A. It has always been my intention if anybody tried to blackmail me, to try and get them in a hole if I could.

Q. That was your intention a long time before? A. All my life.

Q. This was the first time that there had ever been an opportunity?
A. Ever been an opportunity.

Q. When you met Mr. McNab on Sunday in pursuance of the communications and telephones, it was at his office, was it? A. Yes, sir.

Q. In the Mills Building? A. Yes, sir.

Q. Any one else present but you and him? A. No, sir.

Q. Did you inform him then that you had determined upon this plan of paying money into the hands of these Senators by some method of that kind? A. I told him I wanted money to get into the hands of the Senators, but I wanted to do it in some way to get proof.

Q. At that stage of the general conversation you said in answer to the other counsel that you left the rest of it to Mr. McNab? A. Yes, sir.

Q. What do you mean by that—that you left the rest of it? A. The arrangement of the details.

Q. Was the sum of money that was to be used spoken of between you and Mr. McNab then? A. That night we talked of \$500 apiece for each of the Senators.

Q. That Sunday, between you and him, you talked of trying to raise \$2,000? A. Yes, sir.

Q. Besides the \$250 for Jordan? A. Yes, sir.

Q. That was the amount, \$2,250, that it was understood should be gotten into the hands of these parties by an arrangement of which Mr. McNab would attend to the details? A. Yes, sir.

Q. Did he attend to all the details subsequently? A. I do not know who attended to the details. I dropped out of it after I turned the money over, as I explained.

Q. Did he state to you what the details were to be? A. He never stated anything of the details.

Q. Was there any conversation between you and him as to how the money was to be raised? A. No.

Q. What? A. No; I was to do that part of it.

Q. Was there not any understanding or arrangement between you and him directly or indirectly as to who was to stand the loss of this money? A. Not a word.

Q. What? A. Not a word.

Q. Who is to stand the loss of it? A. George Perrine and myself.

Q. Alone? A. Alone.

Q. And there never has been any conversation whatever with any other person in regard to their standing the loss of a part of it? A. No, sir.

Q. Never? A. No, sir.

Q. No such conversation between you and Mr. McNab? A. No, sir.

Q. Was the money ever in Mr. McNab's hands? A. No, sir; not that I know of.

Q. Was it ever in any one's hands except yours in the aggregate? A. I

told you that the money was turned over by me to some party whom I never saw before in the rotunda of the Mills Building, Mr. McNab being there at the time, and indicated by a nod of his head who the party was.

Q. That was on Monday? A. That was on Monday; yes, sir.

Q. That was the next day after you and he talked on Sunday? A. Yes, sir.

Q. Had the money not been raised prior to that time? A. No, sir; the money raised prior to—

Q. (Interrupting.) Prior to the talk between you and him on Sunday? A. No, sir.

Q. When did you raise the money? A. I raised the money on Monday noon, or about noon—may have been between half-past eleven and twelve o'clock.

Q. On Sunday, you said McNab would arrange the details; did he inform you what the details would be? A. No, sir.

Q. Did he tell you when to be there on Monday? A. No, sir.

Q. Was there no arrangement made on Sunday for you to meet him on Monday? A. No, sir.

Q. Was that Sunday that he said he would indicate a man by a nod or a wink, or was it on Monday he said that? A. On Monday.

Q. That was the first time that you knew anything of what the details were to be? A. Yes, sir.

Q. Was there, on Sunday, anything said at all between you and him in regard to the details? A. No, sir.

Q. What? A. No, sir; excepting that I suggested that the matter be put into the hands of Mr. Tichenor.

Q. And he agreed to that? A. And he agreed to that.

Q. Did you know Mr. Tichenor? A. I did.

Q. If you knew him, why was it necessary that you should have a nod or a wink from Mr. McNab in order—when he came there? A. Because Mr. Tichenor probably would not have done that matter for me.

Q. That is, because you did not want Mr. Tichenor to know that you were interested in it? A. I had no way of reaching Mr. Tichenor.

Q. Did you have any conversation with Mr. Tichenor at all? A. No, sir.

Q. Have you ever had since? A. No, sir.

Q. You understood that it was to be arranged entirely by Mr. McNab? Who did you understand was to pay the expense of having a detective of that kind? A. Nothing was said of that.

Q. And you know nothing of that since? A. No, sir.

Q. You never have been asked to pay any of them? A. No, sir.

Q. And you know of nobody that has been? A. No, sir.

Q. You know nothing about who was to pay the expenses of this method of getting money into these hands? A. No, sir.

Q. Was anything said at that time by Mr. McNab in regard to a man, other than this man, being employed in the scheme? A. What other man?

Q. Any other man to be a witness or anything of that kind? A. No, sir.

Q. Any conversation between you and Mr. McNab as to how this matter was to be evidenced? A. No, sir.

Q. What answer. A. No, sir.

Q. And has there been at any time since? A. No, sir.

Q. You know nothing of that except what you have read? A. That is all.

Q. After you handed this money to a man indicated by Mr. McNab on Monday, you have never had a conversation with the parties in San Francisco about the details of it? A. Until to-day.

Q. Until to-day? A. Yes, sir

Q. With whom, to-day? A. With the prosecuting attorney of this county.

Q. Well, is he in San Francisco? A. He was in San Francisco.

Q. That is the place you had it; you have had none with Mr. McNab? A. No.

Q. You know that Mr. McNab is counsel for that company—was interested in that respect, did you not, all the time? A. In respect to what?

Q. To having these Senators entrapped? A. It never occurred to me.

Q. It did not occur to you that the Continental Building and Loan Association had any interest in entrapping these Senators, did it? A. No, sir; because I expected to have the pleasure of doing so by other proceedings.

Q. To entrap them by other proceedings? A. No; to bring this thing to a focus by other proceedings.

Q. Well, why did you desire to entrap them? A. I did not expect that they were going to be entrapped to be used in this manner; I didn't know anything about the Continental using my thunder in the way that it was used.

Q. You did not know that the Continental was to explode this for the benefit of itself; that is, the way it has? A. No.

Q. When did you first find that out? A. When I read the "Bulletin."

Q. Have you objected to it? A. Have I objected to it?

Q. Yes, sir. A. No.

Q. Then you are willing they should steal your thunder—when you found you could not help yourself? A. There was nothing else to do but to be willing.

Q. At what time on Monday did you meet Mr. McNab? A. I met him in the forenoon.

Q. At his office in the Mills Building? A. I think I met him at his office in the Mills Building.

Q. How long were you there before you proceeded to the rotunda to carry out this scheme? A. I went to Mr. McNab after I raised the money and told him I had the money.

Q. How much did you tell him you had? A. I told him I had sixteen hundred and fifty.

Q. And he thought you could buy them with that just as well as with more? A. Yes, sir.

Q. Was he the one who suggested that? A. No, sir.

Q. Who did? A. I did.

Q. You never had had any previous experience? A. No.

Q. What made you think that? A. Because I thought if the men would sell themselves for five hundred dollars, they would sell themselves for three hundred and fifty.

Q. Why did you not offer less? A. It was proportionate. The demand had been made for two thousand dollars of three companies, and I had raised two thirds of the sum and we were going to try it on. I

would have been willing to put up the balance, if necessary. What I have done, I have done in my individual capacity, without any knowledge of my board of directors, and they do not even know that I am here now.

Q. When you told Jordan on Sunday you would not give him anything to prevent the committee investigating your company, you did not mean it? A. I certainly did.

Q. If you did mean it, how came you to go to McNab to raise this money? A. I was willing to lose the money for the sake of the exposure of the graft, but I was not willing to pay any money for blackmail.

Q. Then you did not mean what you said to Jordan, that you would not raise any money? A. I have answered that question, sir.

Q. Did you recognize this man Tichenor when Mr. McNab gave you a nod towards him? A. I didn't give the money to Tichenor.

Q. Did you know this man to whom you gave the money when Mr. McNab gave you a nod towards him? A. I did not know him; it was not Tichenor.

Q. Then Tichenor was not the man who appeared in the rotunda? A. No, sir.

Q. You do not know who the man was? A. I haven't the faintest idea.

Q. Had you ever seen him? A. No.

Q. Have you seen him since? A. Yes, sir, when I gave him one hundred dollars—I gave him fifteen hundred and fifty, and the next day gave him one hundred dollars more.

Q. At the same place? A. At the same place.

Q. Was Mr. McNab with you then? A. Mr. McNab was present then.

Q. That was on Tuesday? A. Yes, sir.

Q. Was the money counted in Mr. McNab's office before you took it down? A. It was not.

Q. And you had it in your possession all the time you were in his office? A. No, I did not have it in my possession when I was in his office; I had not it with me at all.

Q. When you got the money, where did you meet Mr. McNab, after the first time you had the money in your possession? A. In the rotunda of the Mills Building.

Q. That was pursuant to the arrangement made between you and him. A. He telephoned me to meet him there.

Q. Was there any conversation between you and him when you met him in the rotunda? A. Not a word.

Q. Simply gave him a nod? A. Gave him a nod, and I passed the money and walked out.

Q. How far did Mr. McNab stand from you and the man—how far away? A. I should judge twenty feet—fifteen feet.

Q. How was he dressed? A. He had, as near as I recollect—he had a brown and white mixed goods suit on, and he was an elderly man, I should say perhaps fifty-five years of age—maybe more, with a mustache.

Q. When you met Mr. McNab, he simply gave a nod towards that man? A. That is all.

Q. Did you walk right across and hand him the money? A. I did.

Q. Was it all in one package? A. No; there was three hundred and fifty dollars in each of the four envelopes and a hundred and fifty in another, making five envelopes.

Q. What did the man do? A. Put it in his pocket.

Q. What did he do then? A. I don't know.

Q. Did he walk away? A. I didn't see. I just simply walked up to him and outside of the door.

Q. You passed on? A. Passed on and out of the building.

Q. Did not go back to Mr. McNab? A. No, sir.

Q. Did not talk with him any further about it? A. No, sir.

Q. And you understood that all the arrangements from that time on were to be under the control of Mr. McNab, did you? A. Yes, sir.

Q. And since that time, there has been no conversation between you and Mr. McNab as to how the details of it were to be carried out? A. No, sir.

Q. And at the time you did not expect that this matter would be investigated here? A. I certainly did.

Q. I thought you said you expected it in some other way. A. I did not expect it to be investigated on behalf of the Continental Building and Loan Association.

Q. You understand now that it is? A. I understand now that it is.

Q. You have not seen Jordan since that time you saw him in room 64 of the Capital Hotel? A. I saw him on the train to-day.

Q. On the train? A. Yes, sir.

Q. Was there any conversation between you and him? A. No, sir; I did not speak to him.

Q. I understand that you and he are friendly? A. I don't know.

Q. Is there any difference in the relation between you and him, just as it existed in the past? A. I don't know as there is any difference. Mr. Jordan is not a friend of mine and not an enemy of mine, that I know of.

Q. Did you have any idea why it was that he came to you on this business? A. I presume that he came to me because he knew me personally.

Q. Did you express any surprise that he should come to you on an errand of that kind—to get money for the Legislature or its members? A. Not at all.

Q. It did not seem to you that there was anything about that transaction that was at all surprising? A. It may have been surprising, but I am in the habit of never expressing surprise to anybody, but receiving facts as they are given.

Q. Did you reprove him in any way for suggesting that money be paid to give the legislators? A. Not at all.

Q. Did not suggest that there was anything wrong about it? A. Not at all.

Q. Did you think that there was anything wrong about it. A. I certainly do.

Q. Why did you do it, then? A. To trap the blackmailers.

Q. And yet this thing had never occurred before? A. No.

Q. But you had made up your mind a long time before that you were going to do it. A. The first opportunity that presented itself.

Q. This man was indicated to you as a man by the name of Newell, was he? A. William Newell was the name agreed upon between Jordan and myself.

Q. Did Mr. McNab know anything about that. A. Yes, sir; I told him.

Q. He knew that the man was to be known by the name of Newell? A. Yes, sir.

Q. And you don't know, now, who Newell was? A. I have not the faintest idea.

Q. You never thought it was worth while to inquire? A. Never have inquired.

Q. Did it occur to you that there was anything wrong in taking part in a conspiracy to put money into the hands of the legislators—members of the Senate—as a bribe? A. I thought it was meritorious.

Q. You thought it was meritorious? A. When it was done for the purpose of making an exposure.

Q. And you did not expect to get the money back? A. No, sir.

Q. Suppose the exposure did not accomplish the purpose, did not you consider it would be a bribe? A. I never gave the money as a bribe; I gave the money solely for the purpose of making an exposure.

Q. You did not expect to get the money back, did you? A. No. It is worth the money to get men out of the Senate of the State of California that will accept bribes.

Q. Did you and Mr. McNab talk that over about how much it would be worth? A. No, sir.

Q. Sure of that? A. I am sure of it.

Q. What conversation was had between you and Mr. McNab, or you and any other person, in regard to that, as to how much it would be worth to do this? A. There was no conversation. I talked with Mr. Perrine and asked him how much he would be willing to give me for the purpose of going after them, and he said: "I would be willing to give you one third of twenty-five hundred dollars or twenty-two hundred and fifty dollars." He gave me eight hundred and some odd dollars.

Q. You have no knowledge whatever whether this man to whom you handed the money ever gave it to Jordan, save what Jordan said to you, have you? A. No, sir.

Q. That is the only knowledge you have of it? A. That is all.

Q. Whether the money ever passed beyond the hands of Jordan, you know nothing about it? A. I don't know anything about it.

Q. In any way, shape or manner? And you have no knowledge whatever as to Jordan having any power or authority to represent any Senator, except what he said himself? A. That is all, sir.

Q. Did Jordan tell you the times and places where this money had been paid? A. No, sir.

Q. He did not state to you the places where it had been paid? A. No, sir.

Q. And you never inquired of him what evidence he had of this? A. No, sir.

Q. If you were so anxious that this should be a trap, and would be assured that these men would be exposed, how is it that you were not interested in the evidence? A. Because I knew that Mr. McNab would get the evidence.

Q. You knew that Mr. McNab would look out for that? A. Yes, sir.

Q. You trusted that entirely to him? A. Absolutely.

Q. Have you any interest in the Continental Company? A. None whatever.

Q. Is that company and yours of the same nature? A. No, sir.

Q. Was it part of your animus and determination to try and get rid of these Senators because you thought you could easier oppose the bill in the Assembly? A. On the contrary.

Q. Did you think these Senators would favor your bill, or oppose that bill? A. I didn't know anything what they would do.

Q. How is it on the contrary? A. Simply because—the reason why I said “on the contrary”—if it happens that those Senators have any personal friends in this Senate, that perhaps my acts would recoil upon me in asking for any legislation or in opposing any legislation.

Q. Why did you think it would recoil upon you, if you were engaged in an honest act of righteous exposure? A. It would not recoil on me with any Senator who would look at the matter dispassionately, but personal friendships sometimes go beyond dispassionate judgment.

Q. So you really thought it would injure you in that position, this movement? A. No; it would have no effect at all; but I was in hopes that the Senate of the State of California was what I supposed it to be, composed of honorable gentlemen, and that they would probably view the thing in the same way that I did, that men who were blackmailers should be gotten out of the way.

Q. You did not know that any of these Senators were blackmailers, except what somebody else told you? A. I never heard that any Senator was a blackmailer.

Q. When you say you talked about these men, and “It will be worth that much to get rid of blackmailers,” what made you think they were blackmailers? A. Because Mr. Jordan had approached me for this money.

Q. Did you believe, simply because Jordan had approached you that way, that you would be blackmailed? A. When Jordan came to me and said that he was able to put off the meeting from Tuesday to Wednesday, I became then convinced that Mr. Jordan represented the Senators as he stated.

Q. Your being convinced was by his statement? A. By his statement.

Q. If you cared nothing about the investigation of your company, why do you call it blackmail? A. It is blackmail, for the simple reason that they demanded money to prevent an investigation.

Q. But if the investigation would do you no harm whatever, it is not blackmail, is it? A. I think so. I think any demand for money for a purpose of that kind is blackmail.

Q. And you thought that they would investigate you if you did not pay this money? A. I did not care for the investigation. I am ready to come up now and be investigated.

Q. Did you think you would be investigated if you did not pay that money? A. I didn't know, and did not care.

Q. If you did not care why did you pay it? A. Simply to catch the blackmailers.

Q. And that was all your idea? A. Yes, sir.

Q. But all of the details were carried out by Mr. McNab? A. Yes, sir.

Q. Did you discuss with Mr. McNab any means of defeating this Assembly Bill No. 75 before this talking of giving this money? A. I may have done so; I do not recollect; very probably I did.

Q. You appeared in the Assembly, you say, in opposition to that bill? A. Yes, sir.

Q. And nobody has attacked you on account of that in any way, have they? A. No, sir.

Q. Then your apprehensions all failed in that respect? A. So far.

Q. And you appeared there before this matter came before the Senate? A. Yes, sir.

MR. CATOR: I think that is all.

THE CHAIRMAN: Q. Who was it that threatened you with the wrath of the "Examiner"? A. Mr. J. H. Mallett came to me and said that the "Examiner" would probably make an attack on my association.

Q. Who is Mr. Mallett? A. Vice-President of the Renters' Association.

Q. Did he state or speak to you authoritatively, do you think? A. I do not know, sir, whether he did or not.

Q. In what way did Mr. Frank Otis, of San Francisco, threaten you? A. In a general way. Mr. Frank Otis, or some one connected with his league, made an attack on me two years ago, and the attack was to be renewed if I bucked this bill.

Q. Where was the attack to be made—in the Legislature? A. In the Legislature; it was my understanding that the attack was to be made in the Legislature and by paid advertisements, if necessary. I will suggest to you if you want to ascertain something more of the animus of Mr. Otis, all you will have to do is to call upon the Committee on Building and Loan Associations of the Assembly, and they can tell you in what manner Mr. Otis spoke to them of me at a meeting they held last Friday night, and I will say, further, that he made the statement to the committee that I had been threatened by the opposition with the Committee on Commissions and Retrenchments in the way of newspaper attacks, if I dared to come before that committee, and the opposition did not reply to my accusations.

Q. I understood you to say, Mr. Grange, that Jordan told you he had delivered the money to Bunkers, Emmons, French and Wright? A. Yes, sir.

Q. You had only his word that he delivered the money? A. Yes, sir.

MR. RALSTON: Q. Did Mr. Mallett tell you who it was that told him the "Examiner" would bring these charges against your company, or assault that company? A. He did not. It may have been an idle threat to force me into line; I do not know.

Q. Then Mr. Mallett did not give you any authority at all? A. He did not.

Q. Simply made that statement off hand? A. Yes, sir.

Q. You did not think enough of it to ask him who it was? A. I did not ask him; I do not care.

MR. CHAIRMAN: Q. Has any one who you know is connected with the "Examiner" threatened you? A. No, sir.

MR. RALSTON: Q. Or any other papers? A. No, sir.

MR. SIMPSON: Q. Mr. Grange, in what shape was the money that you handed to this unnamed party in the Mills Building? A. Fifty and one-hundred-dollar bills.

Q. All in paper currency? A. Yes, sir.

Q. How many conversations did you have with Mr. Jordan in San Francisco concerning this matter? A. Three.

Q. Two occurred at your house, you say? A. All three of them.

Q. The first one, what time of the day? A. The first one was Saturday evening.

Q. Has Mr. Jordan ever called at your house before? A. Never in his life.

Q. Was anybody present at any of the conversations at your house with him? A. No, sir.

Q. How did he gain admission to the house—who let him in? A. I think the first time my Jap servant let him in.

Q. At what time of day was that? A. That was in the evening.

Q. How long did he remain there? A. Probably a half hour.

Q. Had he ever telephoned or in any way communicated with you before that? A. Yes, sir.

Q. Stating that he would visit you? A. Yes, sir.

Q. And the second visit was when, or at what time? A. On Sunday at two or after two o'clock.

Q. Who admitted him to the house at that time? A. I think I did myself, as near as I recollect.

Q. And the third occasion, at what time was that? A. And the third occasion, I know I admitted him to the house.

Q. During any of these visits, did any one at your house attend any of the conversations other than yourself? A. Did they attend the conversation?

Q. Yes, sir. A. There was nobody but myself present at the conversation.

Q. Any one else other than yourself and Mr. Jordan? A. No, sir.

Q. Any one other than the Japanese servant know of his presence at your house? A. I wouldn't like to state positively, but I presume some of the members of my family may have seen him sitting talking to me. I presume very probably there was; I am not positive about it, however.

Q. Subsequent to these visits, you had conversations with him in the City of San Francisco about this matter? A. Subsequent to these?

Q. Yes, sir. A. On last Saturday.

Q. He called at your office? A. Yes, sir.

Q. Was any one present there? A. No, sir.

Q. Other than yourself and him? A. No, sir; he came there to bring me the promised bills. He brought me a valise full of bills.

Q. Did he call more than once at your office? A. On Saturday?

Q. Yes, sir. A. I don't think so.

Q. After that, did he call? A. He may have called; if he did I was not there.

Q. Did you see him again in San Francisco? A. On Saturday?

Q. After that? A. No, sir.

Q. You say the name "Bill Newell"—the fictitious name "Bill Newell" was agreed upon between you and Mr. Jordan? A. Yes, sir.

Q. For what purpose was that name agreed upon? A. For any communications that passed between us.

Q. It was agreed upon between you, then, that you would communicate under that name? A. Yes, sir.

Q. Was it agreed that "Bill Newell" would materialize in the flesh in any way? A. I told him that over the 'phone.

Q. When you telephoned from the City to Sacramento? A. Yes, sir.

Q. Prior to that time, there was no conversation between you and Mr. Jordan whereby "Bill Newell" was to materialize at any time? A. No.

MR. SIMPSON: That is all.

THE CHAIRMAN: Q. I understood you to say, Mr. Grange, that Mr. Perrine agreed to put up one third of twenty-two hundred and fifty dollars? A. Twenty-five hundred—I forget which was the amount stated; he paid me, as near as I recollect, eight hundred and thirty-three dollars.

Q. Eight hundred and thirty-three? A. Yes, sir.

Q. That would be a little more than—— A. (Interrupting.) A little more than; yes, sir.

Q. That would be sixteen hundred and sixty-six? A. Yes, sir.

Q. The full amount? A. Yes, sir.

Q. The full amount was fifteen fifty? A. Sixteen hundred and fifty.

Q. Fifteen hundred and fifty? A. And a hundred dollars sent subsequently.

Q. That would be sixteen hundred and fifty; that is all.

MR. RALSTON: Q. Mr. Grange, one of the Senators asked us to ask you this question: You testified in your cross-examination that you told Jordan you would not pay that money to the Senators unless there were witnesses present to see it paid; is that correct? A. That I told Jordan that?

Q. Yes, sir. A. I don't think I testified to that. I would like to have the stenographer look at his notes.

Q. Did you? A. I don't think I did.

THE CHAIRMAN: You testified in your cross-examination that you told Jordan that you would not pay that money to the Senators unless you had witnesses present to see it paid. If that is not so, what did you tell Jordan? A. What I told Jordan was this: I asked Jordan how the money was going to—I am going into the details now—how the money was going to reach the hands of the Senators, and who was going to deliver it to them; he said he would deliver it to them. I said, "I don't know that that is going to be satisfactory. However, that is a matter of subsequent arrangement." I don't think I said to Mr. Jordan—I don't think I so testified. If I did, in the hurry of the cross-examination, I inadvertently said so—that the money should be paid in the presence of witnesses.

Q. What was your subsequent arrangement with Mr. Jordan? A. Over the telephone, that he should meet this "Bill Newell," and arrangements be made.

MR. SIMPSON: The last time that you saw Jordan in San Francisco, prior to his coming to Sacramento, was at your house, was it not, the last time that you saw him in this matter? A. Prior to?

Q. His coming here and your sending the telephone message to Bill Newell? A. Yes, sir.

Q. When he left you at your house, was there any understanding between you and him that you would have the money—that you would make any payment? A. No; the understanding was that I would advise him the next day what I would do.

Q. And you did not see him the next day? A. I did not see him the next day.

Q. And communicated with him by telephone? A. By telegraph and by telephone.

MR. RALSTON: Q. Mr. Grange, you arranged this money yourself? That is, you obtained these bills yourself, did you? A. No; I sent one

of my employes out to the banks to get the bills. I gave him a lot of gold that I had—the gold that I got from Mr. Perrine, and I gave him a check on the Bank of California for the balance of the money, and he went and cashed the check and then went around to the different banks, so he told me, and secured the bills, because I told him to get them in fifties and hundreds.

Q. After you got those bills, what did you do with them? A. I put them in envelopes—three hundred and fifty each in four envelopes, and one hundred and fifty in one, and delivered them to this person, unknown to me, in the rotunda of the Mills Building, in San Francisco.

Q. Did you take the numbers of those bills before you put them in the envelope? A. I did not.

Q. You did not mark them, then? A. No; I did not.

Q. You gave the money in the same shape and condition—you put this money in the same condition that you received it, in those envelopes? A. Yes, sir.

Q. Was there any designation on the outside of the envelopes, at all? A. No, sir.

Q. Then you took no numbers, made no identifying marks of any kind, on the currency? A. No, sir.

MR. SIMPSON: Q. How did you come to meet him the next day with the other money in a newspaper of coin, that you spoke of? A. Because I was told that one hundred dollars more was needed.

Q. Who told you that? A. Mr. McNab.

Q. And you turned that over in twenty-dollar pieces in an envelope pinned in a newspaper? A. Yes, sir.

Q. What time of the day was that? A. It was between three and four o'clock in the afternoon; just the exact moment I do not remember, but I know it was after banking hours.

MR. SIMPSON: That is all.

MR. CATOR: Q. Did you see in the "Bulletin" last night a statement giving the numbers of those bills, and what the denominations were, and so forth? A. Yes, sir.

Q. What did you think of that, if this money came into your hands in gold from the bank, and you had nothing to do with marking it? A. I told you the details I left entirely with Mr. McNab.

Q. You told me in your cross-examination that Mr. McNab never had this money in his possession? A. I don't think that Mr. McNab paid the money, but I expected the man who attended to it to be shrewd enough to be able to secure and locate his bills that were furnished him.

Q. Then, if this money was marked at any time, as you understand it, then it was marked after it was delivered to this man that Mr. McNab indicated? A. Yes, sir.

Q. Did you see the bills yourself before you rolled them up in a bundle? A. I did not roll them up in a bundle. I rolled them flat in a large envelope.

Q. Did not you notice whether they were marked in any way? A. No, sir, I did not notice; simply counted the money out.

Q. There never was any understanding between you and any other person, prior to your delivery to this man, that they should be marked, so far as you know? A. I knew nothing of the details.

Q. Did you hear of any such details before you delivered the money? A. No, sir.

Q. From anybody? A. No, sir.

Q. That was not explained to you? A. No, sir.

Q. Why was this gold put in a newspaper and handed over? What was the reason for that? A. Simply a convenient way of passing it. I did not want to stop and hand the man twenty-dollar gold pieces, and I put it in a newspaper so that it would be easy for me to pass it to him.

Q. These five twenty-dollar pieces? A. Yes, sir.

Q. And the paper money was wrapped up separately? A. That was on a different occasion that the paper money went to him.

TESTIMONY OF GAVIN McNAB.

Sworn:

MR. GOULD: Q. Where do you reside, Mr. McNab? A. San Francisco.

Q. What is your occupation? A. Attorney at law.

Q. You have heard your name mentioned in connection with this matter by the witnesses on the stand. Will you kindly state what you did in that connection? A. On Sunday, the 23d, I think, is the day, I received the telephone message from Mr. Grange, whose attorney I am, stating that a person representing himself to be the agent of certain persons in Sacramento had been to his house—no; I first had a telephone message asking me to call him up, and when I called him up, I received that message, that he would like to make an appointment with me, to lay the matter before me, because it was a matter of great importance, and involved many names, and he did not want to transmit it to me over the telephone. I appointed 8 o'clock that evening, in my office. Mr. Grange came to my office, and he told me that Mr. Joseph Jordan, a reporter on the "Post," had been to his house the night before, and that day, purporting to represent four Senators on the Committee of Retrenchment and Commissions—I think that is the name of the committee. He said, anyway, they were Bunkers, French, Emmons, and Wright; that a proposition had been extended to him by Mr. Jordan for money on behalf of these people; that Mr. Jordan had conversed quite freely about it, and had gone from his house to the Senators, or stated that he had done so, and was seeking a proposition involving the corruption of these four Senators, the basis of the proposition being that for a certain sum of money they would enter into a contract whereby any association under investigation other than the Continental Building and Loan Association, might have absolute interference from any notoriety and annoyance of investigation, by putting up so much money. They might go to this extent: Either no subpoena to be issued for them, or if a subpoena was issued, that they might make use of it in preparing a highly complimentary and laudatory report of them, to be sent by that committee to the Senate; that the Continental Building and Loan Association was under the enmity of the "Examiner," and that Emmons had told him (Jordan) that the "Examiner" had an arrangement whereby he (Emmons) was to seek to extract from the investigation before this committee some matter on which he might hang an attack upon Mr. Corbin, and then accuse Washington Dodge, through Mr. Emmons and myself, of having compounded a felony; that nevertheless the Senate

Committee on Retrenchments and Commissions was willing to endure the displeasure of the "Examiner," provided they received enough to do so; that the sum of ten thousand dollars would have to be paid, because it would require twenty-five hundred dollars per Senator, and his commission to be paid over and above that, making it probably twelve thousand dollars; that it was worth that to have the "Examiner" camping on their trails. He stated to me: "Mr. Jordan, speaks with the utmost freedom and frankness." He says, "It is astonishing the confidence with which he discusses these matters. Now, it is a very easy thing to put up an arrangement to catch these men." I says, "Are you willing to collect sums of money for the purpose of entrapping these men and exposing this graft for the benefit of the people of the State of California?" He says, "I am, if you will undertake some of the cares and anxieties and details of this." I said, "I deem it my duty to do so, and would, if he would see what arrangements he could make to give the proper semblance to it, and arrange the matter, and he said, "What man would you suggest who is sufficiently skillful for this work?" and I said, "I do not think of anybody just for the moment; that is a matter to be considered." He said, "How would Tichenor do? Don't you think he is clever enough to catch anybody?" I said that "Mr Tichenor will do very well," and I says, "As he is in San Francisco to-morrow, if the other arrangements are completed, he undoubtedly can be procured, if he is willing to undertake the task." He left my office, and after some consideration as to what the best policy was to pursue, it occurred to me that I should need assistance in the matter, and being very friendly with Mr. Older of the "Bulletin," I communicated with him. I remembered that on that evening there was a reception to Mr. Arthur McEwen at Mr. James Barry's house, and that I had been invited, and at the last moment had declined, and I knew that Mr. Older was going to be there, because Mr. Barry had so informed me at the time he invited me. I called for Mr. Barry at his house, and Mr. Barry answered the telephone, and I asked him if he could, without indicating to the others in the house that this message came from me, that I wanted to get Mr. Older to the telephone. Mr. Older came to the telephone and I asked him. I stated that I believed there was an opportunity of accomplishing a vast amount of good to the people of the State, and exposing one of the most infamous blackmailing conspiracies that ever existed if he would lend his assistance, and where might I see him. He says, "I will leave myself, now, and you may call at my room at the Palace Hotel; there is nobody there at present." He says, "Go to the floor where my room is"—I have forgotten the number of his room, but I think it was 264, on the fourth floor, but I had a memorandum of the room at the time, and went over to his room, waiting on a lounge in the hall until he came and let me in. We then discussed this at length, and I suggested to Mr. Older: "I want to have this so that nobody can trace it except ourselves; you need not know where this money comes from until this story is ready. If a certain sum of money is placed in your hands to-morrow, after you are notified by telephone it is coming, will you take that money and keep it and go to the bank and obtain from or have evidence—have that amount of money—and tell you, and will you prepare in advance for having that specified number of greenbacks and record the same in your office, so

that every greenback or gold note will be known?" and he said he would. The next day, when Mr. Grange informed me that he would have the money ready, I communicated by telephone with Mr. Older as to the amount. I then secured another man, who took a position in the rotunda of the Mills Building, to whom Mr. Grange had passed certain bills. I had instructed that man to go to Mr. Older and deliver these, and at a later hour to return to me. I had in the meantime revealed to Mr. Corbin the circumstances, telling him what it was proposed to do, and that Mr. Tichenor, who is employed as an inspector and land agent and outside agent of the Continental Building and Loan Association, should be informed as to this matter. Mr. Grange had previously told me that Bill Newell was the name under which Mr. Jordan would act in Sacramento. I explained the matter to Mr. Corbin, who had previously discussed these matters with me, and he communicated information of his own from various sources on the hostile attitude of this committee towards him. I said, "Here is a splendid chance to unearth a conspiracy that will expose to the whole State of California certain conditions." He entered heartily into it and obtained the consent of Mr. Tichenor to act.

MR. SIMPSON: Q. Who was it that obtained the consent of Mr. Tichenor? A. Mr. Corbin—or at least he so informed me. I explained to him that whatever was done in Sacramento, that Mr. Tichenor must have a witness, and that he must not allow Mr. Jordan to obtain from him those bills and then say that he had paid these Senators and allow these Senators to take the attitude that Mr. Jordan was the only guilty person, and that they had no responsibility, and presumably Mr. Jordan had buncoed everybody and taken the bills; that Mr. Tichenor should—whom I had known myself in other cases, must understand that this was a question of being exact; that Mr. Grange would communicate—I did not mention—that the party—I did not mention Mr. Grange's name. I only took Mr. Corbin into my confidence to the extent that parties were going to do it, and that Mr. Jordan should name two associations, taking the Phoenix and the Renters', that having been the talk with Mr. Grange; but I did not inform Mr. Corbin whether the Renters' or the Phoenix or Mr. Grange or Mr. Perrine knew about this proposition at all, or whether we were selecting these arbitrarily, knowing that Mr. Jordan was open to the transaction, but that a telegram would go from some person to Mr. Jordan, a person in whom he had confidence, and that a conversation would occur over the telephone and that this Mr. Tichenor would know that this man was ready to receive him as Newell, and that these four Senators were to be paid and that the contract was to be made, and that Mr. Jordan must repeat that contract to Mr. Tichenor—that these associations were to be protected from molestation and annoyance. The number of Mr. Jordan's residence I obtained from Mr. Grange, and communicated it to Mr. Corbin. In getting it over the 'phone, they made a mistake in one number in the residence, and they went up to Sacramento. I had communication from Mr. Corbin that he had received a communication from Mr. Tichenor that there was no such number; I think it was 116—the telephone had left out a number, and Mr. Tichenor had gone there. I then called up Mr. Grange and I asked him: "What was that number you gave me? Read it back," and he read it back, and my remembrance of it was that it was 1116 Seventh street; I know that was the

number. The next day I received a message from Mr. Corbin saying Mr. Tichenor telephoned—it was either that night or the next day; I am not sure just of the time—no, it was that same evening, Monday evening—I received communication—no, it was Tuesday—that same Tuesday afternoon, I received communication from Mr. Corbin saying: “Mr. Tichenor says the party is on strike; he says the contract was two hundred and fifty dollars for himself, and that he would not see any of the Senators until the other hundred comes up.” I then sent for Mr. Grange to repeat the performance and I telephoned to Mr. Older to get another greenback. Mr. Grange brought over the money and the same man received the money and the same man carried the money up to Mr. Older.

MR. SIMPSON: Q. What is the name of that man? A. That name is Moses Heins; he is a deputy in the Assessor’s office in San Francisco—has been there many years. I then sent word to Mr. Corbin: “We must have another man carry that hundred up, because nothing must be allowed to stand in the way of this exposure,” and he said then that Mr. Russell would go up and take a position in the rotunda of the Mills Building, just as I directed, and the same man or any man could come. So a man came, and I was going down in the elevator, and I indicated which direction, and Mr. Heinz went over and gave him that and he went to Sacramento, and I then heard from Corbin that Mr. Tichenor had said that Mr. Jordan had trouble with the Senators; that all but one of the Senators did not want to take that money from any other than Mr. Jordan. I understood from the telephone that there was one of the Senators who was willing to take the whole lot of money, but that the other three Senators did not want him to take the lot; that was my understanding over the ’phone. Then Mr. Tichenor telephoned: “If I can see myself, and my witness can see these men receive this money plainly, is it all right?” “If you can produce evidence”—my message to Mr. Corbin—I did not communicate to Mr. Tichenor. These messages, you will understand, passed between Mr. Corbin and myself, because he was the one communicating with Mr. Tichenor—“If he can get evidence that would convict in a court of justice, seeing this money passed, and that is the best he can do, why, do it.” That is all I know about it, excepting that Mr. Tichenor handed me—this is the only communication I have had with Mr. Tichenor until to-day or yesterday—no, yesterday afternoon he handed me this as the key of Mr. Jordan’s room [exhibiting key]—to 1116 Seventh street.

MR. GOULD: Q. 1106? A. No; I understood it to be 1116. He said that Mr. Jordan had given him this key and told him to use it. I offer the key.

THE CHAIRMAN: Q. I understand you to say that is the key? A. Mr. Tichenor handed me that key as the key of Mr. Jordan’s room, saying that Mr. Jordan had given him that key and told him to open the room and go in and out as he pleased during the proceeding.

Q. The key to the room or to the house? A. I understood the house; I do not know whether it was the room or the house; I am not sure. He said the room, but whether he meant the house or the room, I do not know.

MR. SIMPSON: Q. Mr. Tichenor could tell that? A. Yes, sir; Mr. Tichenor. I wanted to give my entire connection with the subject-matter, so you can take it here. I am not sure whether he said room

or house, but my understanding was room. Have you any questions?

MR. GOULD: No further questions.

THE CHAIRMAN: Have you any questions, Mr. Copeland or Mr. Cator?

MR. COPELAND: Is the committee disposed to sit any longer to-night?

THE CHAIRMAN: Yes, sir.

WITNESS: I understand that there are some other witnesses who want to be examined to-night, because they desire to get away. Have you any questions that you desire to ask?

THE CHAIRMAN: I would like to ask some questions.

WITNESS: I will be in attendance at any time. If it is going to be convenient to any witness, they can take up my cross-examination at any time they wish.

MR. COPELAND: We do not care to discommode any witness in this matter at all, and if Mr. McNab will be here all the time—— A. (Interrupting.) I will not be here all the time. Might I ask the Senators if it is the purpose to hold these sessions in the evening?

THE CHAIRMAN: I am not so positive about that. We desire to get through with this examination as speedily as possible, and if it is going to be a lengthy investigation—and it gives evidence of being—that possibly the committee might meet in the afternoon, as well.

MR. COPELAND: Q. What I was about to say, Mr. Chairman, is simply this: Mr. McNab being one of the attorneys in this matter and also a witness, we can cross-examine Mr. McNab at any time, if there are any witnesses here that the committee wishes to examine to-night; in order to save them any trouble, we are perfectly willing to allow Mr. McNab to step aside.

MR. GOULD: I suggest that Mr. Older is here and very anxious to return.

THE CHAIRMAN: There is one question I note here; I understood you to say, Mr. McNab, that you called up Mr. Older at Mr. Barry's house?

A. Yes, sir.

Q. He having gone there to attend a reception given to Mr. McEwen? A. Yes, sir.

Q. You called him up on the 'phone? A. I did, and first got Mr. Barry on the 'phone, and asked him to bring Mr. Older to the 'phone.

Q. And in your conversation with Mr. Older—after your conversation with him, I understood your direct testimony was this—I think possibly it was a slip of the tongue: That you left your house; that you then left your house—you meant by that that you were telephoning from your house? A. No; I went from my office to the hotel and telephoned to Mr. Older, and went from the hotel to the Palace Hotel, because he had some distance to come.

Q. I understood you to say that Mr. Older left your house. You meant to say Mr. Barry's house? A. Yes, sir; left Mr. Barry's house.

Q. I think it will appear in the notes—— A. (Interrupting.) If it was, it was an inadvertence.

Q. I wanted to call your attention to that. A. I live at the Occidental Hotel in San Francisco, just across the street from my office, and I went from the hotel to my office, and then to the Palace Hotel to await Mr. Older, he being at Mr. Barry's house. I had never been out there, and in looking it up I found it was on Haight street, and I knew it would take him some time to get there and I had to wait fifteen minutes in the hall for him to arrive.

Q. I think your direct testimony as taken by the stenographer would show that you said Mr. Older left your house; you meant Mr. Barry's house? A. Yes, sir; that was an inaccuracy.

MR. COPELAND: Q. Then, with that understanding, Mr. McNab will return?

THE WITNESS: Oh, certainly.

TESTIMONY OF FREMONT OLDER.

Sworn.

MR. GOULD: Q. What is your full name? A. Fremont Older.

Q. Where do you reside? A. In San Francisco.

Q. What is your occupation? A. Managing editor of the "Bulletin" of San Francisco.

Q. How long have you occupied that position? A. Ten years.

Q. Do you know Mr. McNab? A. Yes, sir.

Q. You have heard, Mr. Older, related the circumstances alluded to by the first witness and the corruption of certain Senators. Will you state to the committee here the circumstances in connection with their affairs that came to your notice?

MR. COPELAND: Before that question is answered, I would like to say now that Mr. McNab has testified to the facts that were all hearsay. Now, this witness, as I understand it, proposes to testify to facts that are not only hearsay, but are doubly hearsay—that passed through two or three parties. I do not believe that that sort of testimony is testimony that should be allowed. Mr. Older, as I understand it, is about to tell what Mr. McNab told him that Mr. Grange told him, Mr. McNab, what Mr. Jordan told him that somebody told him, Mr. Jordan. It seems to me that there should be an end to that.

MR. SIMPSON: Perhaps you had better wait until the question is asked.

MR. COPELAND: Very well.

MR. GOULD: Proceed, Mr. Older, and state in your own way, these circumstances. A. The first I heard of this affair was a week ago last Saturday night. I was at Mr. Barry's house as Mr. McNab has stated, and was called to the telephone by Mr. Barry—

MR. SIMPSON (interrupting): Let me caution you, Mr. Older, in giving your testimony now, as nearly as possible confine yourself to what you did, and not what was reported to you by Mr. McNab. A. Just what I know. Mr. McNab stated over the 'phone it was a very important matter, that he would like to see me as soon as possible, and I asked him if it would not do in the morning, and he said no; I said I would be down about 11 o'clock, and he said it was very important, and could not I come down at once, and I excused myself and came down to the Palace Hotel and told him to meet me there in front of my room. He then outlined, briefly and effectively, this plan, stated that they wanted to know if I could have in my possession the following day twenty-two hundred and fifty dollars in greenbacks, if I would have the money to be used—the money was to be used in Sacramento. He did not state anything definite about it, but he intimated that it was to be used to trap certain members of the Legislature, and I stated that I would; he said that he could not tell me any of the particulars then, and he said:

"You just do as I say, and later on, you will know." So the next day, Monday—I went the first thing Monday morning and got greenbacks, fifteen hundred and fifty dollars. The first statement Monday night was twenty-two hundred and fifty, but before I got the money, he telephoned me that it would be fifteen hundred and fifty; I then got the fifteen hundred and fifty dollars, and he told me over the 'phone to take the numbers and put the bills in four envelopes, each envelope containing three hundred and fifty dollars, and one envelope containing one hundred and fifty dollars, and to make a record on the outside of the envelope of the number of the bills in the envelopes, and to designate each envelope with a letter, so that I would know it, and to hold it there until a man came to me with a like amount of money, and when I satisfied myself that the same amount had been handed me, to hand these packages to the man who called upon me. I sent to the business manager of the paper and got the money; I had him in the room with me, and I read the numbers from the bills to the business manager and made record of that on a sheet of paper, and then we both counted them and both witnessed placing them in the envelope and sealing them, and then we wrote the numbers on the envelope, before we sealed them, and when the five packages were ready, I put them in my pocket and waited until this man came; he simply walked into the room and said he came from Mr. McNab, and laid five packages on my desk, and I then went into the other room to open these packages and found fifteen hundred and fifty dollars in five packages as I had placed them. I then gave him the marked packages and he left my office and I heard nothing of it until the next day and Mr. McNab rang me up and said another hundred dollars would be up there, and to do with that the same as I had before, and I got the business manager, and went through the same writing, in a similar envelope, and marked it and handed it to him. The money came up in a newspaper.

MR. SIMPSON: Q. Do you know the man? A. I never saw him before; that is, not that I know of my personal knowledge.

MR. RALSTON: Q. You say that you marked the numbers on the envelope; what do you mean by that? A. The numbers that were on the greenback, each package that had three hundred and fifty dollars, I placed on the outside of the envelope that the number was in, giving the number of that greenback, and I marked "A," "B," "C," "D," "F"—I excepted "E"—the letter on each envelope over the numbers. The idea was that when the envelopes were taken off, these bills would be recovered and would correspond with the envelope, knowing from whom they came. That was my understanding.

MR. GOULD: Q. Do you know the number of those bills? A. At the present time I do not.

Q. Have you a record of it? A. I signed each slip myself and had Mr. J. H. Crothers, business manager, sign it with me, and they were in a drawer in my office; I intended to bring them up here, but forgot them.

Q. Do you know whether that list published in the "Bulletin" is correct? A. That list is what Mr. Tichenor made. He opened the envelope and made a list and I used his list in the "Bulletin," and not mine. I had mine—made a reproduction of it, but it was large and unwieldy, and I didn't use it, and I have only printed the Tichenor

list; I have not gone over them to see that they corresponded, but I presume they do.

MR. GOULD: That is all.

MR. SIMPSON: Q. When this currency was placed by you in these envelopes, was any mark placed upon it? A. Any bill?

Q. Yes. A. No, sir.

Q. Simply noted on the outside of the envelope? A. That it contained the bills—numbers of the bills; of each bill I placed numbers outside.

Q. There were four bills in each? A. I have forgotten about that. There were some hundred-dollar bills—both hundreds and fifties—nothing but hundreds and fifties.

Q. Were there any marks on the envelopes other than that? A. The letter "A" and under the letter "A" the numbers.

Q. The envelopes were blank otherwise? A. Nothing written on them at all.

Q. Or printed? A. Nothing written or printed.

Q. What color were they? A. I think they were buff—light—not quite white, but cream color.

Cross-Examination.

MR. COPELAND: Q. You say these envelopes were brought to you. By whom were they brought to you? A. I do not know the man. The first time I went out into the ante-room, and told the office boy I was expecting a man any moment. "When he comes up here," I said, "open my door and show him in, and not announce him." So the man was shown in by the boy without any announcement as to name. The second time I was busy, and the boy came in with a name, which I did not recognize; I was telephoned that he was coming, and I opened the door, and I think it was the same man that came the second time; I am not sure.

Q. When the man came the first time, how much money did he bring to you? A. \$1,550.

Q. In one envelope? A. In five.

Q. You took those into your possession and opened them? A. Yes, and counted the money, and found it was \$1,550.

Q. What did you do with that money? A. That money I put in a safe.

Q. Then you took some other money? A. I had already prepared some other money before this came, and handed it to the man.

Q. Then you just simply changed the money? A. That is it.

Q. That is all you really know about this case? A. That is all by actually seeing it.

Q. That is all you know of your own knowledge? A. Yes, sir.

Q. Just that you received this money? A. Yes, sir.

Q. And that you changed these envelopes? A. Yes, sir.

Q. And that you had somebody in the office take the numbers? A. I read the numbers to J. H. Crothers—wrote it down on a slip of paper as I read it—the number of each greenback.

Q. That is all you know about this? A. That is all I know by actually seeing it.

MR. CATOR: Was there any gold handed to you? A. Yes, sir; in that hundred dollars that came up in the newspaper there were four

twenty-dollar pieces, and a twenty-dollar greenback, as I remember it.

Q. Did you mark the gold in any way? A. No, I kept the gold and the twenty-dollar greenback, and put the \$250 and a hundred-dollar greenback in an envelope with the bills I had got before that were in the safe.

Q. Then if the testimony of Mr. Grange is correct that you heard here, that \$100 of this money which he handed to Moses Heins, whom he supposed to be a man by the name of Newell, was in gold, there was some of these bills which you marked that were not handed to him, were there not? A. Were not handed to whom?

Q. Did you hear Mr. Grange testify that \$100 of this money that he handed in the rotunda to the man that Mr. McNab identified as Moses Heins, was five twenty-dollar gold pieces? A. He said five twenty-dollar gold pieces were put in a newspaper, but there were four twenty-dollar gold pieces, and a twenty-dollar greenback as I remember it; there were not five twenty-dollar gold pieces; one was a greenback, I think.

Q. Why do you say that? You did not see this money handed in the rotunda? A. No, I was in my office.

Q. Then you have no knowledge that what Mr. Grange says is not so, do you? He says there were five twenty-dollar gold pieces; you have no knowledge that is not so? A. No; my belief is that Mr. Grange made a mistake about there being five twenties; one was a greenback.

Q. Did you hand the money to Mr. Grange? A. No, I never saw Mr. Grange until to-night.

Q. If he did hand five twenty-dollar gold pieces to him, then some of the money which you marked did not reach this man Heins? A. No; Mr. Heins brought these four twenties, and a twenty-dollar greenback to me, and I handed him the \$250 and a hundred dollar bill in an envelope, with the number of the greenback on the envelope, and Heins took that away with him, and I kept and put in the safe the four twenties and the greenback.

Q. Heins is the man that brought the money to you? A. The second day I learned his name was Heins.

Q. That is after it had been delivered by Grange? A. I did not know where it came from—had no idea.

Q. Didn't you think it a little strange that Mr. McNab should invite you to participate in the details of this matter in that way? A. No, sir.

Q. Why did you think that you should be selected to mark money in that way? A. I did not mark money.

Q. I mean to take down a list of the notes? A. My idea of it was that he expected me to handle the story when it came, and that he wanted to let me have sufficient contact with it to be able to verify to some extent the story, so that I would be convinced.

Q. There was some talk between you and Mr. McNab about the story, was there not? A. Certainly not. It was not necessary to mention that part.

Q. By that you mean that the "Bulletin" intended, when it was ready, to exploit it in one story? A. Yes, sir; that was my intention; it was not necessary to discuss it.

Q. Had there been any conversation between you and Mr. McNab

prior to that time in regard to any method of resistance to what was being published in the "Examiner"? A. In regard to this?

Q. No, not in regard to this, but had there been any conversation between you and Mr. McNab prior to that time as to whether or not something ought to be done to resist in some way the influence of the stories that were being circulated through the "Examiner"? A. No, sir.

Q. Was not the "Bulletin" prior to that time engaged repeatedly in denying the matter that was published in the "Examiner"? A. What matter?

Q. The matter in regard to the Continental Building and Loan Association? A. No, sir; the "Bulletin" has never denied the story that was the outgrowth of this—the Corbin story.

Q. The "Bulletin" has never denied the statements in the "Examiner" that Corbin was an embezzler and defaulter, and so forth? A. No, sir.

Q. Has it not stated many times in substance before that that an assault was being made by the "Examiner" upon this association for political purposes against McNab and Dodge? A. Yes, sir.

Q. Were you not interested with Mr. McNab in trying to bring about something that should react against those publications? A. We never had discussed any plan or any story at all.

Q. Never had discussed the details of it? A. No.

Q. But had there not been in general an understanding that it was desirable that something should be done? A. No, sir; not about the Continental Building and Loan Association.

Q. How came this story to be so perfectly prepared for the "Bulletin" as it was published last evening—the names of all these men, and everything? A. I did not know the names of the Senators. I knew there were eight members of the committee, but I did not know which ones, who they were, and I telegraphed up here to Sacramento to my correspondent here to send me the names of all the members of the committee—to wire them to me. I got them in the evening, and the next morning I sent this telegram which contained all of the names of the committee in an envelope to Mr. McNab, and I wrote him a note, and asked him to draw a line under the names of those men who had received this money. In the meanwhile I had been informed that they had received it, and he drew a pencil mark under the four names, Bunkers, Wright, French and Emmons, and I did that so that I might be able to begin and prepare for the story.

Q. When was the preparation of the story first commenced in your office? A. That must have been about Wednesday night—about Thursday night, I think that I got the names. Maybe it might have been Wednesday morning—Thursday morning, I think it was, and then I began preparing the story, and then when Tichenor's report came I received that and the report of the other man, and I got a copy of the affidavit, and Dr. Dodge's statement, and wrote the story, and prepared it and made it up.

Q. Did you know Tichenor personally? A. I did not know that it was Tichenor that had gone up here at first, and Mr. McNab did not tell me who it was, but I had known Tichenor years ago, and knew he was in Los Angeles, and I heard that a man was coming from Los Angeles, and I guessed it, and I said to Mr. McNab, "I

think I know the man; it is Tichenor." This was some time after Tichenor had been up here. I guessed Tichenor.

Q. Did you know Heins when he called at your office? A. No, sir.

Q. Did anybody tell you who he was? A. No, the first day I did not know it at all. The second day I only got it by the boy bringing the name in.

Q. Did you know he was a clerk in Dr. Dodge's office? A. No, sir, never heard of him or saw him before.

Q. Did you know that Tichenor was an employé of Corbin? A. I had heard that he was working for the Building and Loan Association in Los Angeles.

Q. If you were not anxious, and had not taken into consideration about the "Examiner," did you not consider that it was a very important part of this matter that the "Examiner" should be attacked and discredited and brought in contact with this charge? A. I began first following the proceedings in Sacramento after I learned of this, very closely, and when I found that Mr. Corbin had been subpoenaed to appear here, and when I found he had disobeyed the subpoena, I then made inquiries, and ascertained that at the proper time he would come, when this matter developed, and that this affidavit would be read when he did appear, and so forth, and I naturally knew from reading the "Examiner" that they were expecting quite a sensation when he came here, and so forth, and I knew this was another plan for another story.

Q. You knew that the "Examiner" and Mr. McNab were on very bad terms, didn't you? A. Yes, sir.

Q. Didn't you and Mr. McNab talk over the subject, that if you could bring about an explosion of this kind in regard to these Senators, and entrap them in this way, it would be a great scoop, as you call it in the paper, and a great stroke of policy, and a newspaper job against the "Examiner?" A. We did not have to discuss it. As soon as the details of the plan were known to me, it was so obvious to me, there was no necessity to discuss it.

Q. Did you do it? A. No.

Q. Did not do it? A. Any more than to say that the story would be ready on Monday.

Q. When was the story that appeared in last Monday's "Bulletin," that especially attacked the "Examiner," written? A. There was one running article. The article that was published on Monday was written on Saturday.

Q. When was the article written which spoke of an interview with Dr. Dodge, and went on to state the malignancy of the "Examiner," and so on? A. I do not know when it was written. It was handed to me Saturday morning.

Q. Then all this matter was prepared practically before this affidavit was read to this Senate? A. Yes, sir.

Q. It was all ready to be published in the "Bulletin" in the shape in which it appeared yesterday afternoon? A. Practically; as soon as the affidavit was read.

Q. So that in addition to punishing the Senators for being willing to accept money, you had in mind all the consequences which would flow from the several pages of matter as it there appeared, did you not? A. I had in mind the entire story. As a news story it bore some on the "Examiner's" course in the matter and also on the Senators. It was all one story, connected logically.

Q. Had you been told that there had been a demand for \$10,000 from this company, the Continental Building and Loan Association? A. I heard that, I think, Saturday; yes, I think I heard it Saturday.

Q. Did you consider that this publication that you had taken as a whole was calculated to aid the Continental Building and Loan Association as against the things that had been said against it? A. I had no desire whatever to aid the Continental Building and Loan Association. I have no interest in it whatever.

Q. Why was this article prepared, and why did it so frequently refer to the Continental Building and Loan Association, and to the attacks upon it, and that they were unjust, and include this letter of Dr. Dodge, and all that, if the purpose was not to aid the Continental Building and Loan Association? A. The "Bulletin" did not say that these attacks on the Continental Building and Loan Association were unjust in regard to the matter of Mr. Corbin. In that article that you refer to yesterday it did not.

Q. It occurred in several places in the statement of Dr. Dodge, and other places—— A. (Interrupting.) Dr. Dodge was writing for himself, and it was signed by him.

Q. The article speaks for itself.

MR. CATOR: I will offer that in evidence, and produce it at a later date.

THE CHAIRMAN: What is that you desire to offer?

MR. CATOR: The "Bulletin" article of yesterday afternoon which was prepared by this witness as a part of the arrangement between him and Mr. McNab.

THE WITNESS: It was not a part of the arrangement between us, any more than it was a news story, that I was permitted to handle because of my acquaintance with Mr. McNab, and his confidence in keeping the matter secret until such time as it should be published.

THE CHAIRMAN: The committee has allowed you considerable latitude.

MR. CATOR: I am willing to quit at any time that the committee thinks they have got enough of it.

THE CHAIRMAN: The committee thinks they have got enough of it.

MR. CATOR: I wish to state this. I have never had a word of communication with the "Examiner," and the "Examiner" and myself have never been on terms that are of the greatest intimacy for a long time, but at the same time I offer this for the purpose of showing what the methods are that are underlying this at every place it touches. It may be important later on. I am not now accusing Mr. Older of any untruth in his statements, but the motives that are in this matter are important as touching the actions of other witnesses, and I draw the motives from him, and I will show at a later date what bearing they have.

THE CHAIRMAN: Do you desire to examine this witness further in regard to his direct testimony? You went away beyond that. The committee expects to be lenient in this investigation.

(To Mr. McNab): Have you any other witness that you desire to bring?

MR. McNAB: We have two or three other witnesses we desire to bring.

THE CHAIRMAN: Mr. Robert, do you desire to testify? Is he one of your witnesses?

MR. McNAB: No, he is not.

MR. ROBERT: No, I am not one of his witnesses.

MR. McNAB: Is this Mr. Robert?

MR. ROBERT: Yes, sir, how do you do, Mr. McNab?

MR. McNAB: Nothing like knowing ourselves.

MR. OLDER: This gentleman desires to ask a question.

MR. JACOBS: I wish to ask the witness one or two questions.

THE CHAIRMAN: Are you one of the counsel?

MR. JACOBS: Yes, sir.

THE CHAIRMAN: The committee has been rather lenient in this matter, but I think we will have to adopt the rule that one attorney for each side will do the questioning, and not half a dozen attorneys from each side. You will have to select one attorney to conduct the cross-examination.

MR. McNAB: I understand, that does not mean if one attorney is absent, or retires, the other cannot take his place?

THE CHAIRMAN: Oh, no.

MR. McNAB: One at a time.

THE CHAIRMAN: Yes, sir.

MR. McNAB: One to one witness?

THE CHAIRMAN: Yes, sir. We will permit the question at this time, but it prolongs the investigation unnecessarily.

MR. JACOBS: Q. The "Bulletin" published a statement of the time and place where this money was paid to these different Senators, did it not?
A. Yes, sir.

Q. Upon whose report did you publish or base that publication at that time? A. Tichenor's.

Q. Was that merely a written report or an affidavit? A. It was written in the form of an affidavit, but I do not think it had been sworn to. I got a typewritten copy of it. It may have been in some other form, but mine was merely a copy of it—a blank, and there was no name to it at all.

THE CHAIRMAN: Mr. Robert, do you care to take the witness stand?

MR. ROBERT: Yes, sir.

THE CHAIRMAN: The committee has decided that they are not at present calling any witnesses pro or con in this matter, but they thought possibly, as your name had been mentioned in the affidavit which had been filed by Mr. Corbin with the Senate, that you might desire to take the witness stand, and make some statement with regard to it.

MR. ROBERT: I do by all means.

THE CHAIRMAN: I understand that Mr. Robert desires to go to the city in the morning. Have you any further questions of Mr. Older?

MR. JACOBS: No.

THE CHAIRMAN: If there is no objection on the part of—

MR. McNAB (interrupting): No objection whatever, Mr. Senators.

THE CHAIRMAN: Mr. Robert will take the stand.

TESTIMONY OF DENT H. ROBERT.

Sworn.

MR. SIMPSON: Q. Mr. Robert, how is your name pronounced? A. R-o-b-e-r-t.

Q. Your name is mentioned in an affidavit filed by Mr. Corbin as follows: "Said agent for said Senators further stated that the 'Examiner' had employed Emmons to manage its plans in the committee, and

that Dent H. Robert, editor of the 'Examiner' had agreed that Eugene E. Schmitz, Mayor of San Francisco, should give Bunkers a municipal appointment in San Francisco, at a large salary, provided he would do his utmost against said Washington Dodge and the Continental Building and Loan Association. Said agent further stated that said Dent H. Robert had said to Senator Bunkers that the Continental Building and Loan Association must be ruined at any cost. Said agent further stated that the 'Examiner' had settled with Messrs. Wright and French, and had further agreed with said four Senators that arrangements made by them with other corporations would not be disturbed or attacked, provided the committee would 'do up' Dr. Dodge, Corbin and the Continental Building and Loan Association." I think that is all that is in this affidavit referring to you. Do you wish to make a statement before the committee? A. Yes, sir; I do.

Q. All right. A. Every statement that you read there and every statement in the affidavit as I read it myself originally, pertaining to myself or the "Examiner," is absolutely and deliberately false. I have never in my life seen or spoke to any one of the four Senators who are accused of bribery. If they are in this room to-night, I do not know them. I have never met any of them—Bunkers, French, Wright or Emmons. I have never seen any of them. I have never talked with any of them. I have never had any arrangement of any kind whatever with any of them. I have never asked Mayor Schmitz to give Bunkers a position, or any one else. Never since he has been Mayor of San Francisco have I ever asked him for a position for anybody.

THE CHAIRMAN: Q. Do you know who is meant by "agent"? Somebody is meant here as agent—"had agreed with the agent." Do you know who was meant? A. No. Can you give me more of the sentence?

Q. Yes. It says: "Said agent for said Senators further stated that the 'Examiner' had employed Emmons to manage its plan in the committee, and that Dent H. Robert, editor of the 'Examiner,' had agreed that Eugene E. Schmitz, Mayor of San Francisco, should give Bunkers a municipal appointment in San Francisco at a large salary, provided he would do his utmost against Washington Dodge," and so forth. A. I take it that it means the agent said to have gone from Sacramento to San Francisco to make this alleged deal, as I understood Mr. McNab to testify that that was the representation that Jordan made.

Q. You know Mr. Jordan? A. Yes, sir; he was formerly on the "Examiner"—several years ago.

MR. RALSTON: Q. He never made any such statement to you? A. I have never spoken to Mr. Jordan, I think, for three years.

Q. The remark that you make, that is applied to the Senators also applies— A. (Interrupting.) Or to the representative of the Senators, or anybody who discussed the subject, or anybody who knew anything about it. My entire knowledge of this whole investigation as pursued here was obtained about ten days or two weeks ago, I do not remember exactly, when I got a telegram from Mr. Murphy saying that Senator French had come to him—I do not remember exactly the language, but I will get you the telegram, if you wish it, from the Postal Company—that Senator French, chairman of the Committee on Commissions, had come to him and told him that he was going to investigate building and loan associations, and asked if we had any information concerning them. I then sent Mr. S. F. Myrtle, who had been conducting the investi-

gation of the Continental Building and Loan Association, to Sacramento, and he saw Senator French and told me that he had told Senator French of what information we had, and said that it was at the service of the committee. That is the end of everything. That is the only connection we have had with it. They have charged us with instigating the appointment of that committee. I presume it will not be difficult for the committee to find out likewise that that is untrue. I did not know that the committee had been appointed until I got this telegram from Mr. Murphy. This is merely malicious.

MR. McNAB: I would like, before the conclusion of the examination, to recall Mr. Robert for cross-examination, and I would like him also, when I recall him, to have the books of the "Examiner" to show the money expended by the "Examiner" to the Hassell Audit Company for the purpose of doing detective work in the guise of stockholders for the purpose of ruining the Continental Building and Loan Association. I will ask him to bring the books to show the amount of money that has passed.

THE WITNESS: I will tell you now, if you wish to know.

MR. McNAB: No; I want to examine Dr. Dodge before cross-examining you.

THE WITNESS: I have no objection to stating that now. I cannot see its relation to the alleged bribery. I can well see its relation to the investigation of the Continental Building and Loan Association, and it will all be there.

MR. SIMPSON: Assuming that the "Examiner" is inimical to the Continental Building and Loan Association, and that is shown here, what relevancy has that to this investigation?

MR. McNAB: I will directly connect it with the investigation. This is not a fishing investigation at all. I will directly connect it with this investigation, and I will connect it as completely as if he were in court.

THE CHAIRMAN: Is there any objection on your part to making that statement at the proper time?

THE WITNESS: Not the slightest. I will make it now, if you wish it.

MR. McNAB: I do not wish to harass the gentleman. I would like to cross-examine him after examining Dr. Dodge.

THE CHAIRMAN: Do you desire to ask Mr. Robert any questions?

MR. COPELAND: No.

THE CHAIRMAN: Does any gentleman desire to ask anything?

MR. RALSTON: I would like to ask this question: Mr. McNab says he wishes to ask Mr. Robert some questions after examining Dr. Dodge. We ought to have some time set for the gentleman to be here so as to make it convenient for him.

THE CHAIRMAN: When will it be convenient for you to cross-examine?

MR. McNAB: I presume this inquiry, at the rate it is proceeding to-night, will not proceed long.

THE CHAIRMAN: I think we will go on to-morrow.

MR. SIMPSON (to Mr. McNab): I would like to ask you how you propose to connect any feeling or attitude of the "Examiner" toward the Continental Building and Loan Association, with the question before this investigating committee as to whether or not this money was paid over to the accused Senators? Is it a question of motive?

MR. McNAB: Motive directly; that this was a part of the motive and part of the conspiracy. The witness here admits that Mr. French com-

municated through Mr. Murphy with him. That brought this trouble. For five weeks the "Examiner" had the Hassell Audit Company of San Francisco going over the books of the Continental Building and Loan Association of San Francisco, not to establish whether or not it was sound, but to establish some matter out of which they could make a persecution of Dr. Dodge and others and the stockholders, regardless of what ruin they might inflict on the stockholders. In that investigation they went over the books which they found were sound. Their man told me and told the Secretary of the Continental Building and Loan Association, and told everybody else, that the books were absolutely sound, and the assets all there. These matters, you have not heard. But after the subpoenas were made out, Mr. Myrtle furnished to this committee a list of things that no other person could know; a list of books to be presented to this committee, and a list of papers that no other man knew, about matters years after they were closed. The committee themselves knew this thing. If the committee goes to Mr. Myrtle, and Mr. Myrtle to Mr. Robert, and Mr. Robert to the Hassell Audit Company, it is all the same machinery. If the committee is the obedient servant of this man, it does not make any difference whether it acts through the Hassell Audit Company or Mr. Myrtle or anybody else, as long as it is carrying out the transaction; that is a matter that goes to the corroboration of these details we have produced here.

MR. SIMPSON: You do not claim that the "Examiner" knew of the receipt of any money by these Senators?

MR. McNAB: I have not any doubt but that Mr. Emmons was paid by the "Examiner" five hundred dollars. I have not any proof of it.

THE WITNESS: You have not any proof of it, and it is absolutely untrue.

MR. McNAB: I know you have stuffed ballot-boxes.

THE WITNESS: That is absolutely untrue. You have robbed widows and orphans —

(Here Mr. McNab and Mr. Robert were both talking at once and the Chairman rapping and calling them to order.)

MR. McNAB: I rise to a question of privilege.

THE CHAIRMAN: Mr. McNab, you take your seat.

THE WITNESS: The statement that we ever paid Senator Emmons or any other member in the Legislature on that committee or any other committee five hundred dollars or any other sum is absolutely untrue. I am perfectly willing now, if the committee cares to hear it, to tell the whole story of the Continental Building and Loan Association. I fully expect to tell the whole story before the committee that is to investigate. They can have every book that is in the "Examiner" office in reference to it. I will furnish them the books that I have now. There is nothing that I have that is not at your service.

THE CHAIRMAN: That will be a matter for another committee.

THE WITNESS: This committee can have it if it so desires.

MR. RALSTON: That is for another committee.

THE WITNESS: So it seems to me.

THE CHAIRMAN: We do not want to put anybody to any special annoyance, and want to treat everybody with every courtesy we can, and we would like to have Mr. McNab cross-examine this witness, so as not to interfere with his business in any way.

MR. McNAB: I will not interfere with his business. If I find I can not do it without interfering with his business I will not do it at all.

THE WITNESS: I will come here at any time that the committee desires me.

THE CHAIRMAN: For the present time, if there is no further question to be asked by any member of the committee, or by any of the attorneys, you will be excused.

THE WITNESS: Thank you.

TESTIMONY OF GEORGE N. TICHENOR.

Sworn.

THE CHAIRMAN: How long will your examination of this witness take, do you think?

MR. McNAB: Well, I should think his direct examination would take a half an hour, and on the same plan that Mr. Cator cross-examined the other witness, I should think his cross-examination would take two hours.

THE CHAIRMAN: We will take the direct examination.

MR. GOULD: Q. What is your name, Mr. Tichenor. A. George N. Tichenor.

Q. What is your occupation? A. I am inspector of agencies for the Continental Building and Loan Association.

Q. Where do you reside? A. 113 Webster street, San Francisco, Cal.

Q. Do you know Mr. Corbin? A. I do.

Q. During the week following the Sunday of the 23d, did you have any conversation with Mr. Corbin which resulted in your taking any action with reference to members of the Senate? A. On Sunday, January 22d, at Los Angeles, I received a dispatch from Mr. William Corbin requesting me to come to San Francisco on the "Owl." I left Los Angeles on Sunday evening at 5 o'clock and we were held up by a wreck, and I arrived in San Francisco on Monday evening at 5:30 P. M. I went to the office. I met Mr. Corbin. He requested me to go to Sacramento and see a man by the name of Joseph Jordan, who was rooming at 116 Seventh street, and who was reporting for the San Francisco "Evening Post." He instructed me to go to the rotunda of the Mills Building, and there I would see a gentleman, and I was to raise my hat, and from that gentleman I was to receive five envelopes, which I presumed were to contain money. I was to take the name of William Newell, and call on Mr. Jordan at Seventh street in Sacramento, and inform Mr. Jordan that I was there in the interests of the Phoenix Building and Loan Association and the Renters' Loan and Trust Company, and that the money was to be used on Senators Emmons, French, Bunkers, and Wright.

Q. State whether or not you followed out those instructions, and describe what you did. A. Under instructions from Mr. Corbin I called around at the Mills Building, and I stood right near to the entrance of the Oil Exchange, where the building goes out in on Pine street, and I saw a gentleman approaching, and I raised my hat, and he handed me those five envelopes [exhibiting]. One was marked "A," with the numbers of the bills on it; another was marked "B;" another was marked "C;" another "D" and another "F."

MR. GOULD: We will offer these in evidence. In a moment I will hand them to the committee.

THE WITNESS: I am not through with them yet.

Q. Proceed. A. The gentleman handed me those envelopes. I put them in my pocket, and he left.

Q. Proceed, Mr. Tichenor. What did you next do? A. I next employed a man in San Francisco, who will be introduced here later, to proceed with me to Sacramento and observe the paying over of this money.

Q. Go on. A. I left San Francisco on the 7 p. m. train, arrived in Sacramento at about 10:35 p. m., and I then went to the Western Hotel, and registered under the name of William Newell and occupied room 73, and retired for the night.

Q. What did you do the succeeding day? A. The following morning I arose, I guess between 8 and 9 o'clock. I went up on First street to find the number, and I found that there was no 116 First street; that the Southern Pacific Railroad yards intersect there; that the numbers start in at about five hundred. I came back and entered the telephone office and called up Main—I do not know what their number is now, until I look—[looks at little memorandum book]—Main 1866 in San Francisco, and I asked for Mr. Corbin. When I received word that Mr. Corbin was at the other end of the line, I told them that there must be a mistake in giving me the number of Mr. Jordan's residence; that I found no 116 on the street. He said, "All right; I will find out for you." I says, "All right; I will call up again in twenty minutes." At the expiration of twenty minutes, I called him up again, and he said there was a mistake; he said it was 1116, and not 116. I then went and located the house where Mr. Jordan was rooming. That was during the morning hours. At—oh, I should judge about ten minutes past one in the afternoon, I called at the house and rang the bell, and it was answered by a young lady. I asked if Mr. Joseph Jordan lived in the house, and she told me that he roomed there, but was out at present, and stated if I was the gentleman from San Francisco who had the appointment with him, he requested me to wait. I told the young lady that I would call back in a few minutes, and I called in again, I should judge it was about half past one, and the young lady answered the door-bell again, and she admitted me, and I went into the parlor, which was the room occupied by Mr. Jordan.

Q. Proceed. A. At about 1:45 or 1:50 p. m., Mr. Jordan came in, introduced himself, and I presented myself to him as Mr. William Newell of San Francisco. We then talked over the business in hand. I told him what I was there for, that I was representing the Phoenix and the Renters', and was informed that he was familiar with the conditions that we were to handle. He then asked me,—he says: "Well, have you got my money?" I says, "I have got a hundred and fifty dollars for you, Mr. Jordan." Well, he says, "The understanding with me was that I was to receive two hundred and fifty dollars." I told Mr. Jordan if that was the understanding, that he was to receive the two hundred and fifty dollars, I would assure him that the other one hundred dollars would be coming. In addition to that, I told Mr. Jordan that I had three hundred and fifty dollars in currency for each of the four Senators, and stood ready to pay the money over to them.

Mr. Jordan says, "Now, if you will stay right in the house here, I will go right up to that Senate and I will catch those men there and bring them right to the room here, and have you pay the money over here. I says to Mr. Jordan if it was agreeable to him, I would like to step to the hotel for a few minutes. He says, "All right. How long before you will be back?" I says, "In a few minutes." He says, "All right; you take that key"—it was a pass key—"and when you come back, you use that key to come in the front room and go into my room and do not ring the bell."

Q. Did you see the key presented by Mr. McNab? A. No, sir; I did not.

Q. I will ask you if that is the key [exhibiting key]. A. I don't know. If that is the key that will open the front door, that is the key.

Q. The key that he gave you opened the front door? A. I opened the front door with that key.

Q. Proceed with your narrative. A. Mr. Jordan and I left the house together at about 2 o'clock, he to go to the Senate, and I to the hotel, presumably. After Mr. Jordan had gone down Seventh street up towards the—what is the next street to K this way?

Q. L. A. When he turned around L street, I went and met the gentleman whom I had instructed to keep watch of me while I was there, and informed him what Mr. Jordan had promised to do for me. I says, "I want you to keep just as close watch of me, and the people who enter that building, as you possibly can, and note who goes in and who comes out."

Q. Go ahead. A. Then I returned to the room at about 2:20 or 2:25—around there somewhere—and Mr. Jordan came back to the room, and stated that he had only been able to see Senator Bunkers, and Senator Bunkers informed him that the arrangement was agreeable to him, and that he stood ready to receive his money. Mr. Jordan said, "We cannot do anything until after the Senate adjourns, and won't be able to do anything until after 5 o'clock," and says, "I will go up and get the rest of the Senators together and have it arranged so you can pay this money over at 5 o'clock." And he was to meet me near the Golden Eagle Hotel on K street. Mr. Jordan and I again left the room, he going down Seventh street toward L, and I turned up Seventh street and went into K there, and I met the gentleman who was watching me, and I told him everything was off until 5 o'clock. At about 5 o'clock I met Mr. Jordan near the hotel at the corner of Seventh and K streets, the Golden Eagle Hotel, and he stated that they had all agreed to accept the money excepting Senator Emmons, and Senator Emmons had objected to receiving the money from any other person excepting Mr. Jordan, fearing—bringing too many people into the transaction would cause it to leak out. I told Mr. Jordan then—I says, "Well here, Mr. Jordan, I stand like this: I have been sent up here by the Renters' and Phoenix, and I do not propose to deliver any pig in a bag to anybody, and if the Senators do not want to accept this money from me, we will call this deal off." "No," he says, "I would not do that, Mr. Newell." "Well," I says, "I do not see any other course for me to pursue." He says, "Supposing that you give this money to one of the Senators." I says, "What Senator?" He says, "Senator Emmons." I says, "No; I do not like the reputation Senator Emmons has in Kern County, and I would prefer to have some of the

other Senators distribute this money; but," I says, "I will tell you what I will do; I will take up the matter with your friend in San Francisco"—whom he called Green, but who, in reality was Mr. Grange. I says, "I will take up that matter in San Francisco with that party, and I will find out what distribution they want to make of this money." Prior to that, when he had told me that he wanted the other hundred dollars, I had gone to the telephone office, and I had telephoned to Mr. Corbin and stated that Mr. Jordan would not deliver the goods unless he received the extra hundred dollars. Mr. Corbin had told me to call him up again in twenty minutes, which I did, and he said it was arranged for the hundred dollars. He says, "Mr. Russell will leave on the 7 p. m. train."

Q. What next took place? A. After I had the last conversation with Mr. Jordan relative to the disposition of the money, I again went to the telephone office and called up Mr. Corbin and informed him that it would be impossible for me to deliver the money, and that I would like to have some definite instructions from him concerning the matter. My instructions from him were to call him up again in twenty minutes. This I did, and in reply to that, he stated: "You must use your own good judgment in the matter, and if you can see the money paid, that is all that is required." I then went up to Hanlon's saloon, where I had promised to meet Mr. Jordan when I left him at 5 o'clock, and he was standing on the sidewalk in front of the saloon. I called him to one side and I told him: "Why, here, the Renters' and the Phoenix they object to Mr. Emmons handling that money, but they have agreed that you can pay this money over yourself, provided it is done in such a way that I am enabled to see the transaction." He says, "That is a perfect impossibility; you know that." I says, "No; I do not think so, Jordan." I says, "A man in the newspaper business, it ought to be an easy trick for him." I says, "I will tell you what you do: You get the men on the street and in conversation with them, pass them this money. All I want to see is a passage of this money. I do not expect that you are going to stand there and count that out." He says, "Yes; I guess I can do that all right." He says, "When do I get my money?" I says, "After you have paid the four Senators; you do not get it before." He says, "I am going to see Senator Emmons and pay him the money, and you meet me on the corner of Seventh and K streets." He walked into Hanlon's saloon, and I walked on down K street toward Seventh, and on the way I met the gentleman who was watching the movements of myself and Mr. Jordan, and informed him of what was going to take place. In a few moments, Mr. Jordan joined me at Seventh and K. We proceeded to his room.

Q. What took place there? Did you have these envelopes with the money in them during all this period of time? A. Yes, sir. On the night of the 23d, when I arrived in Sacramento, I got these envelopes open, and in addition to the numbers, I put the name of the bank opposite to the numbers on this envelope, and then on one of the greenbacks in each envelope—that is, each of the four—I wrote an initial.

Q. What initial? A. On the envelope that was marked "C"—I will have to get my glasses to tell you what it is. [Witness puts on his spectacles.] On a gold bank note number C975434, Department Series, I wrote in ink on the lower margin of that bill, the letter "F." There was in this envelope seven fifty-dollar bills.

Q. And in the envelope marked "C," the writing on that describes those bills? A. Yes, sir.

Q. That were in the envelope when it came into your possession? A. Yes, sir; the writing was on it when it came into my possession, and this writing I put on it afterwards [indicating].

Q. That is, you refer to the writing in ink that was on the envelope when you got it? A. Yes, sir; with the exception of "F."

Q. Then after you received these, you wrote in pencil? A. I wrote in pencil the number of the bank opposite the number of the bills.

Q. Proceed. A. In the envelope marked "D," there were seven fifty-dollar bills and on the note marked B383475 No. 2104 P, First National Bank note of Santa Barbara, Cal.. I marked on the lower margin of that note in ink, the letter "B."

Q. In reference to the ink writing on these envelopes— A. The ink writing was on there with the exception of the second "B"; that is in my handwriting. All of the balance on there was on that when I received it, with the exception of the lead-pencil writing. That I put on myself. In the envelope marked "A," it contained three hundred and fifty dollars, seven fifty-dollar bills, and on the bill No. C937120, Department Series, Gold Bank Note Certificate, I wrote in ink on the lower margin of that bill, the letter "W." All of the writings on there with the exception of that ink was on there at the time I received it.

Q. All except the letter "W" in ink? A. Yes, sir; all except the letter "W" in ink; all the rest in ink was on there.

Q. The pencil writing you placed there yourself? A. Yes, sir. On the envelope marked "D," when I cut it open, I found that it contained seven fifty-dollar bills, three hundred and fifty dollars, and on the Norfolk National Bank of Norfolk, Nebraska, numbered B272215, No. 3347 W. I marked on the lower margin of that bill, in ink, "M."

Q. And the writing in ink was there when you received this envelope? A. Yes, sir.

Q. And the writing in pencil you placed there? A. Placed there myself. I received in the envelope marked "F," three hundred and fifty dollars in bills.

Q. And the ink writing there was on this envelope when you received it? A. Yes, sir.

Q. And the pencil you placed on there afterwards? A. Yes, sir.

Q. The pencil is merely the description of the bills? A. The pencil is the description of the bills. It gives the bank name of the bill.

MR. GOULD: I will offer now these in evidence.

THE WITNESS: From the four envelopes that are marked A, B, C, and D. and which contained fourteen hundred dollars, I took from those envelopes, those fifty-dollar bills and put them on the inside of this pocketbook (exhibiting). I had this book here, and the three fifty-dollar bills I placed on the opposite side. At a few minutes past six o'clock, when I called at the room with Mr. Jordan at 1116 Seventh street, he asked me—he says, "Have you got my extra one hundred dollars yet?" and I says, "No, sir; I have not." But it was on the way, it would leave at 7 o'clock that evening, and it would be here so that I could pay it to him. I then took out the fourteen hundred dollars in fifty-dollar bills from my pocketbook and laid it on the table, and I says, "You better count that now, Jordan, to see that it is all right." He counted over the number and he says, "That is all right;

let us divide them." I says, "All right; I will divide them for you," and I made the division of those bills just as they appeared in those envelopes there.

Q. That is, those bills that came in each of those envelopes, you put them in a separate bundle corresponding? A. Corresponding to the number of that envelope; yes, sir.

Q. And kept them separate? A. And kept them separate. I handed those to Mr. Jordan. Two of those bundles, two hundred and fifty dollars each, he put one in his front pants pocket, the other one in his front pants pocket, and the other in his hip pocket, and the other three hundred and fifty dollars he put on the inside of his coat pocket. He says, "I am going right out to meet Mr. Emmons, who is waiting for me at Hanlon's saloon, and I will pay him the money right away."

MR. SIMPSON: At what time was this? A. That, I should judge, was not later than ten or fifteen minutes past six at the latest. We came out of the house and separated. Mr. Jordan went to Seventh street and K and crossed over K and went into Hanlon's saloon and I walked on the opposite side of the street and I kept him in view, and he came out almost immediately with Senator Emmons. They cut right across the street from Hanlon's on the opposite corner. On the way they met Mr. Walsh, Senator Walsh.

THE CHAIRMAN: Senator Walsh or Assemblyman Walsh? A. I don't know whether it is Senator or Assemblyman. I don't know him, only by sight. It is a gentleman with glasses. He used to be a clerk in one of the superior courts in San Francisco.

Q. Senator Welch? A. Senator Welch. They conversed a few moments and Mr. Emmons and Mr. Welch and Mr. Jordan went down to 1109 Eighth street, and entered. They remained in there a few minutes and they came out and walked up to the corner of Eighth and K streets, and there they met Mr. Martin Kelly of San Francisco, and two or three other gentlemen, I don't know who they were; they were in conversation there a few minutes, and then Mr. Emmons and Mr. Jordan excused themselves from the gentlemen who were there and passed on up K street. I am not very familiar with the streets in Sacramento, but just above there, there is the second cigar store, they stopped at the second cigar store; it is only three or four doors from the corner.

Q. Up toward Ninth? A. Up toward Ninth on the right-hand side of K street going up toward Ninth, and they stepped to the sidewalk in front of that cigar store, and there Mr. Jordan put his hand in his pocket, and he took out the roll of bills that was in his pocket here.

MR. GOULD: Front? A. Front.

Q. Right hand front pocket? A. Yes, sir. And I was standing right across the street by the American Cash Store, and he handed Senator Emmons that money in front of that cigar store. It was out near the sidewalk. In a few minutes he and the Senator passed on up K street. He shook hands with the Senator and left him, and after the Senator passed up K street toward Ninth—I had followed on the opposite side of the street—Mr. Jordan crossed over to me and says, "I fixed Emmons. Did you see me give it to him?" I says, "Yes; I saw you give him the money." I says, "That is all I want, for the protection of the Renters' and Phoenix I want to see that money pass," and I says, "The reason I want to see that money pass is this: Supposing those Senators tried to

throw me down and say they did not receive the money; I can say, 'At such and such a place you took so much money; now, you do as you agreed, or I will show you up;'" I says, "Where is Bunkers?" And we had only proceeded a few steps when he says, "Here comes Bunkers," and I passed on and I left him. He stopped and spoke to Bunkers. I went down K street, crossed over and stood on the corner of Hanlon's, and Mr. Jordan and Senator Bunkers followed down on K street, and they turned around on Eighth street—there is a peanut stand or something on the corner, and on the back of that, near the window, he put his hand in his pocket and took out the money that he had in his coat pocket and gave it to Senator Bunkers at that place. He and the Senator then walked on up K street, and in about the middle of the block he left the Senator and came back to meet me, and he says, "I have given Bunkers his money; now let us go and see if we can catch Senator Wright and Emmons."

Q. Wright and Emmons? A. Wright and Emmons. No; Senator Wright and Senator French. We went down to the Golden Eagle Hotel, went through the reception room, through the barroom and to the billiard room and out again onto the sidewalk. He says, "Those people must be at dinner." "Now," he says, "they are going to have a committee meeting at 817 Tenth street to-night," and he says, "If you will meet me down there to-night at a quarter to eight, I will meet those Senators and give them the money down there." I told him that was agreeable to me; I wanted to get this off my hands as soon as I possibly could. As soon as I left Jordan, I joined this gentleman whom I had employed, and we proceeded down across the Plaza into Tenth street and I located number 817. We then walked back again, and at a quarter to eight—a few minutes before a quarter to eight—we both proceeded down there and I remained on a part of the block—I stood at the corner of the Plaza and I think it is H street—would not be positive whether it is H or what, but it is on the lower corner of the Plaza, and I remained there until a quarter past eight before Mr. Jordan showed up. He says, "I am a little late," and he says, "We will go down there now." He says, "I will bring out Senator French first, or Senator Wright, whoever I can get, and pay them the money, and then we will be through with this thing." Mr. Jordan went down to 817 Tenth street. He rang the bell, was admitted, and while he was being admitted, I crossed over the street and told the gentleman who was watching: "Now look out; he is going to pay Senators French and Wright here, and then we are through with it." In a few minutes Mr. Jordan came out, and he says, "The committee is in session, and I am unable to see either one of those men." He says, "That committee won't be out before a quarter or half-past ten, and if you will meet me at the Golden Eagle Hotel, they will be looking for me—I told the other Senators, that is, Bunkers and Emmons, to have them find me and get their money. Now they will be looking for me," and he says, "You might meet me at the Golden Eagle at about 10 o'clock. I went to the Golden Eagle at 10 o'clock and I stayed there, and it was 11:25 before Mr. Jordan showed up. He was a little bit put out when he met me, and says, "You are a fine fellow to keep an appointment." I says, "It is on you, I guess; I have been here since ten o'clock." He says, "Where?" I said, "Right here in front of the Golden Eagle, parading up and down, waiting for you to

show up." He says, "I did not tell you to meet me here; I told you to meet me in front of the committee room." I says, "I misunderstood you, Jordan; that is all there is to it." I says, "Did you meet them?" He says, "Yes; they came out at a quarter-past ten. First I met Senator French and gave him his, and then Senator Wright came out and I gave him his." I says, "Where did this occur?" He says, "I gave it to them on Tenth street right after they left 817, first one and then the other, and I have been walking up and down Tenth street until a few minutes ago, and thought something might have detained you, and I went down to the hotel." I says, "If you paid them, I suppose it was all right: I suppose I have got to take your word for it. I suppose you want your money," and he says, "Yes, I do." I says, "I have only got a hundred and fifty dollars." He says, "Why didn't you get the other hundred?" I says, "I will get the other hundred; it ain't very far away." We walked down to the corner of Sixth and K streets and we turned around the corner there and I opened my pocketbook and took out three fifty-dollar bills that is marked on the envelope that contains the three bills, and I gave Mr. Jordan those three fifty dollar bills there. We then turned and came back again to the entrance of the Golden Eagle Hotel, and I says, "If you will wait, Mr. Jordan, for a few minutes, I will go and get that hundred dollars and I will give it to you." He says, "Meet me here some time after 12 o'clock." I says, "All right." I boarded an electric car bound for the depot. I went down there and I met Mr. Russell of the Continental Building and Loan Association, and from him I received an envelope marked "F," unopened, and I took that envelope and I opened it up and I found that it contained a gold note certificate for one hundred dollars, number C879371. I showed this bill to the gentleman who was with me, and also showed him the bills on which I had put my mark at the time that I had cut the envelopes open.

MR. GOULD: Q. That is, you showed him the designation on the envelope of the bills? A. No, sir; I showed him the bill itself. I showed him the fourteen hundred dollars in currency that were in these four envelopes, and in addition to that I told him: "Now, you take down the number of the bill on which I put the initial," which he did. I also instructed him to put down the number of this hundred-dollar bill.

Q. Then this took place before the bills were delivered to Jordan? A. Yes, sir.

Q. I understand. A. Yes, sir.

Q. When did you say you did this? A. The bills that were in the previous envelopes—

THE CHAIRMAN (interrupting): Q. These that you have offered in evidence? A. These that I have offered in evidence. I showed him those bills on Seventh street between K and L, and it was there that he took down the numbers on those bills. This bill here, I showed him the bill and the number of it on Sixth street between K and—

MR. GOULD: Q. And J? A. And J—between J and K.

Q. Is this the envelope in which you— A. (Interrupting.) This is the envelope in which I received that hundred-dollar bill. After I showed that bill to him, I went up to the Golden Eagle Hotel, and at 12:20 Mr. Jordan met me in the barroom of the hotel. We came out. He says, "Have you got it?" I says, "Yes." We walked down the street just a few doors, and in front of a barber shop—I think it is a barber

shop there—I says, “There is no use of going any further; I have got the hundred-dollar bill for you, Jordan. Here it is here,” and I took it out, passed it to him, and I says, “Let us go and get a drink; I would like to have a bottle of wine with you.” He says, “That is agreeable.” and says where would we go, and I says, “Let us go across to the Capital,” and we went across the street to the Capital saloon, and we ordered a bottle of Mumm wine, and Mr. Jordan wanted to pay for it, and I says, “Oh, no, Mr. Jordan; you have done me too big a favor to pay for this wine. I propose to pay for this wine myself.” After we drank the wine, and during the drinking of the wine, we had a general conversation there, and he then told me what his position was in San Francisco, and that he had been employed for a number of years with the “Post.” After finishing the wine, we came out on the sidewalk and I bid Mr. Jordan good morning and proceeded down to the Southern Pacific depot and went into the sleeper and went to sleep.

Q. That is all? A. That is about all; yes, sir.

MR. RALSTON: Q. Could you identify Senator Bunkers or Senator Emmons if you saw them? A. Yes, sir; I could. I never saw Senator Bunkers before that night. I have met Senator Emmons previously. The other Senators I never have seen; I don't know to-day. He described what Senator French looked like, and what Senator Wright looked like, but I never did get to see those Senators. He described Senator French to me as a man of middle age, with gray hair and a gray mustache, and he informed me that Senator Wright was comparatively a young man, with a smooth face, and a little stouter built than I was, so that I would know them when he met them.

MR. SIMPSON: I move that when this committee adjourn, it adjourn until tomorrow afternoon at 2 o'clock. The testimony will have to be written up.

MR. CATOR: I would like to have the stenographer write out the evidence of the last witness first, so that the parties who will cross-examine may have the use of it. The other witnesses have been cross-examined thus far, except Mr. McNab, and it is very apparent that the important testimony that has been given is the testimony of the last witness, and inasmuch as the stenographer says he cannot prepare it all, I would like if the committee would direct that he take it in reverse order and have the testimony of the last witness as early as possible.

THE CHAIRMAN: I do not see any objection to that.

MR. COPELAND: I have an engagement in court at 10 o'clock that I had made, thinking that this matter would not go on in the morning.

MR. SIMPSON: I move that when this committee adjourn, it adjourn until tomorrow at 2 o'clock.

THE CHAIRMAN: When this committee adjourns, it will adjourn to meet at 2 o'clock in room 16, and the witnesses will take notice to appear there. I understand that Mayor Schmitz is here and desires to make a statement before the committee. Is that true, Mayor Schmitz?

MR. SCHMITZ: I understand that the committee wanted me here in respect to that part of the affidavit that refers to me.

THE CHAIRMAN: There is a special reference to you in this affidavit. Do you desire to make a statement?

MR. SCHMITZ: I do.

TESTIMONY OF E. E. SCHMITZ.

Sworn.

MR. SIMPSON: Q. The affidavit says: "Said agent for said Senators further stated that the 'Examiner' had employed Emmons to manage its plans in the committee, and that Dent H. Robert, editor of the 'Examiner,' had agreed that Eugene E. Schmitz, Mayor of San Francisco, should give Bunkers a municipal appointment in San Francisco, at a large salary, provided he would do his utmost against said Washington Dodge and the Continental Building and Loan Association." I think that that was about all that was said in that connection.

THE WITNESS: All I have to say in relation to that, gentlemen, is that it is absolutely false. I have never at any time had any conversation with Mr. Robert or anybody representing the "Examiner" in any matter relative to this case—the case before you—or the Continental Building and Loan Association.

Q. You have never made any agreement as asserted here in this affidavit? A. Absolutely have not.

MR. RALSTON: Q. You never agreed to give Mr. Bunkers any position of any kind? A. Never agreed with Mr. Robert or anybody representing the "Examiner," or anybody else, to give Mr. Bunkers any position of any kind.

THE CHAIRMAN: Does any of the attorneys desire to ask the Mayor anything?

(No answer.)

(An adjournment was here taken until Wednesday, February 1, 1905, to meet at room 16, at 2 P. M.)

THIRD SESSION.

WEDNESDAY, February 1, 1905, 2 P. M.

MR. McNAB: Senators, I would like, if it meets with the convenience of the Senators and counsel on the other side, that my cross-examination be taken up immediately, because there is an urgent business matter that requires me to go to San Francisco. Of course, if it is inconvenient to counsel on the other side or to the Senate committee, I do not ask it, but if it could be done, meeting your general plans, I would like it very much.

MR. CATOR: It will be entirely satisfactory and agreeable to me—anything to accommodate Mr. McNab. Before, however, he is examined, I desire to make a representation to the committee on behalf of the accused Senators. They have had an opportunity, since last night, to meet for the first time in regard to this matter, and I have been requested as counsel here to represent for all of them that as it is apparent here, they are unable to meet with their counsel, as is usual in cases, either civil or criminal, that they know nothing of the names of the witnesses prior to their being brought here. On the face of this matter, as explained thus far, it is a sudden revelation, or may be called an entrapment by those that bring it here, and that they know nothing of the names of the witnesses, their real names having been concealed until they were put on the witness stand, and for that reason they desire to be represented to some extent by some counsel. We have done everything in our power to facilitate the taking of testimony rapidly; we have brushed to the winds any objections and have occupied no time of the committee in making objections or arguing on the admissibility of testimony at all, and do not propose to do so, except when a matter appears so flagrant, as we have no reason to expect it will; and for the reason that they cannot rapidly consult with their counsel here, and have no knowledge with which to consult, and must rely upon the acumen of counsel, they request me to apply for a rescission of the rule last night adopted that only one counsel can cross-examine a witness; and for the reason that there are four Senators, and their liberties are imperiled, as well as their reputations—and while it is made a rule in civil cases, sometimes by rules of court in civil cases where there is more than one defendant, one counsel must examine, yet in civil cases it is not always enforced by any means; but in criminal matters, it is never enforced. As far as I am personally concerned, I have no objection to the rule, further than this: I believe that time will be saved if to some extent that rule be modified. We know that no attorney can suggest to another counsel who sits near him what question to ask and how to ask it as well as he can ask it himself. It takes longer to speak to counsel and suggest to him to ask a question than if he asked it himself —

MR. SIMPSON (interrupting): I move that the request of counsel be granted.

(Motion seconded by Mr. Diggs and carried.)

THE CHAIRMAN: Is it your desire to be cross-examined now, Mr. McNab?

MR. McNAB: If it meets with your convenience and the convenience of counsel. I do not wish to interfere with the wishes of counsel.

MR. CATOR: Mr. Copeland has asked that the cross-examination of Mr. Tichenor be deferred until the meeting to-night; under that, I cannot very well decline to take up another examination that is proper.

TESTIMONY OF GAVIN McNAB.

Recalled for cross-examination.

MR. CATOR: Q. Has the direct examination been concluded? A. It has.

Q. Have you been cross-examined? A. I have not.

Q. How came you to have this first consultation with Mr. Grange? A. As I stated on my direct examination, on Sunday there was a message, either at my office or at my hotel—I am not sure which—to call up Mr. Grange, and I called him up, and he then stated, without mentioning names, and referring only to the matter generally, enough to give me an idea of the importance of the subject, and wished to make an appointment with me, which I made to see him at my office at 8 o'clock Sunday; I am not sure whether Sunday was the 22d. In my testimony yesterday, I think I may have called it the 23d, but it was the Sunday previous to last Sunday.

Q. You say you are his attorney? A. I am Mr. Grange's attorney.

Q. At the same time, you are the attorney of the Continental Building and Loan Association, are you not? A. I am.

Q. How did it happen that in the meeting the next day at your office, with so little conversation, you could say to him that you would take care of all the details? A. The question was discussed at the Sunday evening meeting, and it was then that I considered it and deliberated on a plan from that time forward. It was not consummated until the next day.

Q. Did anybody help you to deliberate in that matter? Did you call in any person? A. Only one man.

Q. Mr. Older? A. Yes, sir.

Q. How did it occur— A. Oh, no; pardon me. The next day I saw Mr. Corbin also in connection with it—no; I saw Mr. Corbin late that night in connection with it, but did not go into the details. All I wanted to know of him that night was, whether Mr. Tichenor would have been in town. He had been in Los Angeles, I was informed. But the next day I spoke to Mr. Corbin about it, quite extensively.

Q. Why did you speak to him quite extensively? A. Because Mr. Corbin was my client, and the information given to me was threatening to him and to the interests that I represented, and it was my duty as an attorney to tell him this.

Q. How was it threatening to his interests, when Mr. Grange had informed you they would not, under any circumstances, decline to examine the Continental Building and Loan Association? A. Mr. Grange stated, as I said in my direct examination, that they would interest themselves on behalf of the Continental for ten thousand dollars net to

the Senators and a sum of money discussed as two thousand dollars to be paid to the agent, but that the purpose of the committee was to persecute the Continental, Dr. Washington Dodge, and myself.

Q. That is what Mr. Grange told you? A. That is what Mr. Grange told me; yes.

Q. You at no time contemplated paying ten thousand dollars, or any other sum? A. No sum whatever, under any circumstances.

Q. If you did not contemplate paying any sum, how then did this matter interest the Continental Company? A. Well, to the same extent as a person might be interested if he witnessed certain incendiarism, perhaps to burn up his house; or if a man stood at the corner and said he would hold you up and do certain things to you unless you submitted to blackmail. You would be interested in both cases. You would be interested as a good citizen in exterminating that class of people for the benefit of your community, and you would also have your personal interests, natural to you, of protecting the interests in your charge.

Q. That was your view of it? A. Yes, sir.

Q. How can it be likened to an incendiary, if you were willing to submit to an examination? A. I will state that question by answering another: We submitted to an examination of this institution by the hands of the Hassell Audit Company appointed by the "Examiner." The expert of the Hassell Audit Company informed me in the presence of others, that the institution, whatever may be said of it in long years past, was one of the most profitable and the best institutions he had ever known; the books were correct, and everything sound. The Secretary of the Building and Loan Commission informed me that he also told him so; Dr. Dodge informed me that he separately told him substantially the same. Now, the work of that party is being manufactured into all sorts of illusions and delusions with the purpose of creating a false impression upon the stockholders of the Continental, to that institution's injury. If a committee composed of blackmailers in the service of any interest inimicable to any institution can present a report by leaving out what should be stated, and putting in what should not be stated in it, that will create false impressions.

Q. Was it not a fact that if this company had given you such a good character as you refer to—was it not an additional reason why you should have submitted to an investigation by the Senate Committee, rather than to have undertaken to furnish bribe money in this manner? Which was the most desirable of those two remedies? A. We have already, as I said, had one examination from hostile hands, and I do not think any person in this room but myself even knows that it existed. The Hassell Audit Company, officially, has not issued that. The Hassell Audit Company did not do that; he was the only man who came in contact with the books, and he only says that personally; he is employed for a distinctly different purpose—for the purpose of creating false impressions. A committee designed for the purpose of creating false impressions can create false impressions.

Q. Inasmuch as this committee had given you a certificate of good character, and you could take their report and bring it before this committee if they would ask you anything about your company, how did it occur to you that you should take this extraordinary method of furnishing bribe money in order to ruin the reputation of these Senators?

A. Men proposing blackmail are not looking to make honest reports or do honest things. No honest man starts out with a proposition of blackmailing any man or any institution. In dealing with these men, you are dealing with criminals, and your interest to the State and to everything that you protect demand that you take summary action.

Q. Had any member of this committee, so far as you know, ever represented, either through themselves or an agent, to you or to any director of the company, or to Mr. Corbin, that they desired money as a condition of acting in one way or another with your company? A. The first knowledge that I had of the demand for money was the statement made to me by Mr. Grange on Sunday, the 23d day of January, 1905—22d day of January, I believe.

Q. Have you ever had any other knowledge than that? A. It has been stated to me, but I have no personal knowledge; I have no personal knowledge now.

Q. Have you any knowledge or belief that any director, or superintendent, or manager of the Continental Loan Company was ever approached by any member of this committee or by its agent with a demand for money? A. I have no such knowledge.

Q. Then all the knowledge you have of it, is what Mr. Grange stated to you they said they would do? A. That is the only official knowledge.

Q. How, then, are you willing to assume that it was the purpose of a committee here to blackmail your company, when no member, or director, or superintendent of that company had ever been approached with a proposition of that kind? A. Well, I considered the statement of Mr. Jordan to Mr. Grange an approach on the subject.

Q. And upon the mere fact that such a statement had been made by a man calling himself an agent of these men, without any knowledge on the part of Mr. Grange, that he really was such, and without the members themselves, or any of the other agents ever having spoken to a member of your company in regard to doing it any good or any harm, you concluded that it was a desirable thing to get up this scheme, did you? A. If they were not guilty they could not be tracked; if they did not take the money, they could not take it, so no wrong would have been done.

Q. How did you know, when you attempted to get up this scheme, that this thing would not take a shape which might involve you yourself in the giving of a bribe? A. I was willing to do my duty as a citizen at all times, and I am, Mr. Cator, at all times; anything that I can do to expose an unfaithful servant and bring into a proper position those in this community who betray their trust and oath of office, I shall do, without regard to consequences to myself, and I have always done so, as you know.

Q. I am precluded from adding at this time to the certificate of character you are giving yourself. A. I am only saying what you said to me the last time we discussed it.

Q. We never discussed the Continental Association? A. No; you were discussing Mr. Hearst at the time.

Q. I stated last night that I was not particularly intimate with the "Examiner" people, and for that reason I stated that—that I did not represent the "Examiner" at all. A. I thought it must have been a recent association, judging from my last interview with you.

Q. Did you consult with anybody in regard to the character of these

proceedings, as to what the legal effect would be? A. None whatever. I was the lawyer in the transaction.

Q. Did anyone else ask you if this was a perfectly safe affair, to conduct it in that way? A. No one consulted me as to the safety of the proposition, at all. I was willing to go before any tribunal in the State of California, where the ends justified the means, and if I could take four political highwaymen on the road in the interest of justice, I was willing to take any chances and any consequences that accrued therefrom.

Q. Your inference that these men were highwaymen arose out of what was said by others? A. That was the premise, but the logical conclusion when they took the money—deductions—the inference followed in my mind.

Q. I am speaking, now, about before you determined—— A. Oh, honest men would not have been hurt by the proposition, because the money never could have reached them.

Q. Do you know of your own knowledge of its reaching them. A. I know on the testimony of a man.

Q. Do you know of your own knowledge? A. I do not; I do not pretend to say.

Q. Then you should be more careful how you speak on the subject. A. I would take the word of the man that told me.

Q. I dare say you would. A. You don't think they would have come to me for money?

Q. Don't what? A. You do not think these four Senators would have come to me for money, do you?

Q. I do not know anything about that. I am not speaking on that subject.

THE CHAIRMAN: I would suggest, Mr. McNab, that Mr. Cator is doing the cross-examining.

THE WITNESS: I accept the suggestion and apologize to the Senators.

MR. CATOR: Q. Did you have any personal acquaintance, prior to the time that you got up this scheme, with either of these Senators?

A. I do not think I have any acquaintanceship with any of them now. I have a general acquaintanceship with a multitude of people in San Francisco, and I may have met Mr. Bunkers; I do not remember of doing so. I do not remember him; I do not know him by sight. I do not think I know Mr. French by sight; I may; I may have met him with somebody that we talked with, and I may have talked with Senator French. I do not remember having talked with Senator Emmons, but I may have done so.

Q. You have no recollection of having had any personal acquaintance with them? A. None whatever.

Q. So far as your personal knowledge goes, then, you had no reason to suppose that they were blackmailers, at that time? A. It depends altogether what blackmailing is.

Q. You are a lawyer, and know. A. In answer to that, I would say one thing: It was within my knowledge for several years that Senator French had been engaged in a very bitter lawsuit with the Continental, and a man who takes a seat on a committee to judge of an institution which is in a bitter controversy with himself occupies a very peculiar position, in my mind. No; Senator Emmons—did I say French?

THE CHAIRMAN: You said Senator French.

THE WITNESS: Pardon me—Senator Emmons.

MR. CATOR: Q. Senator Emmons had a controversy with the Continental Building and Loan Association? A. Yes, sir.

Q. For several years? A. The details of it, I do not know; I was not an attorney in it. I was not attorney in the case, but I know there was a long controversy.

Q. What was the nature of it? A. I don't know. It is a matter in Bakersfield, and the attorneys in it do not correspond with me on the subject; they are acting independent of me.

Q. But you know he had a controversy with them? A. Yes, sir.

Q. And that led you to fear that he would not be fair to it as a committee-man? A. I was not considering it; I did not know that Senator Emmons was on the committee. I understood you to ask me if there was anything that would suggest anything to me from the names. I did not know what this committee was. I did not know that there was such a committee until the Legislature was well along. I did not know what it was nor who were the men on it.

Q. What is meant, then, by your affidavit, which says that the committee was packed for the purpose of injuring the Continental Building and Loan Association? A. I did not make that affidavit.

Q. Did not you see it? A. I did.

Q. Did not you read it? A. I did.

Q. Did you object to that portion of the statement that this committee was packed for this purpose when it was appointed here in this Senate? A. Well, no; I would not object to that statement.

Q. Did you believe it to be true when you saw the statement? A. I may answer that question by just a digression. Of course in reasoning, I reason from a recent event to a past event, and cause and effect; and from the action of that committee, I can certainly say that its action was traceable to a well-defined purpose; men in charge of the committee's transactions, and hostile, so when this proposition, purporting to come from members of the committee, in regard to institutions that they could not possibly have known, and before any examinations were made—

Q. You knew that the committee was appointed by the Lieutenant-Governor? A. I did.

Q. At the opening of the Legislature, did you not? A. I did—no; I did not read this committee.

Q. You knew as a lawyer that committees are appointed when the Legislature commences? A. Yes, sir.

Q. You knew that the committee was appointed in the usual way, did you not? A. I presumed it had.

Q. Did you mean to assert that the committee had been packed by Lieutenant-Governor Anderson? A. The Lieutenant-Governor need not necessarily have been the packing cause.

Q. Did you mean to assert that the committee was packed? A. Judging from the relations and from the associations and developments, I should say that some distinguished gentleman was behind the appointment of the committee. I do not think that Mr. Anderson, the Lieutenant-Governor, had anything to do with it, but I think he was the innocent victim of malign suggestions.

Q. As the committees may have been packed without its appearing,

you may, perhaps, be very good authority. A. You and I are experts on that.

Q. I ask you, not the question whether this might have been done, but I ask you, when you saw this statement in the affidavit, why you did not object to it? A. I believed it to be true.

Q. You believed it to be true? A. And believe it now.

Q. Now, in what sense did you think it was packed, and how did you think that was done? A. I believed the committee having a harmless total—this is only a surmise. As you say, you and I are somewhat familiar with how these things are done. Room has to be made in the natural distribution of the Senators by the President of the Senate, and there is, of course, rivalry for places, and a suggestion could easily be brought forward that a certain innocent committee would please a certain number of men—probably not that way—and there would be more committees.

Q. That is the way? A. I don't know.

Q. Have you any knowledge whether this was an additional committee, or not provided for by prior rules? A. I have no knowledge on the subject.

Q. Were you willing that all that matter in the affidavit should be sworn to by the men who swore to that? A. He swore to it on information and belief, and he had that information, and he states positively that he had been variously informed on this subject, and he had a right to swear to it, and most of the things sworn to in that affidavit have since been proven—you know they are true.

Q. If the parties were unknown to you, and had never sent any agent to your company or any person representing the company, making any demand whatsoever for money, and you only knew what Mr. Grange had told you, why did you resort to this proceeding? Please state why? A. I thought I answered that several times, that when the proposition came to me it appealed to me, both as a citizen and as an attorney, and my duty pointing conclusively to the capture of these men, if it were within my power to do so; I cannot answer more pointedly than that.

Q. Did you hear the statement of Mr. Grange last night that he was looking for this opportunity, or he determined that the very first time he got an opportunity, he would carry out a scheme of that kind? A. Yes, sir; I heard that.

Q. Is it not a fact, Mr. McNab, that prior to this Sunday you contemplated a proceeding of this kind if it could by any possibility be done? A. It never occurred to me at all. I will say if it had ever been suggested that there was an opportunity to do so, I would have done it previous to that Sunday, or on that Sunday, or since that Sunday, or any other week day, or Sunday.

Q. How is it that you got a move on with such celerity in this matter and you and Mr. Grange talked about it? A. Because I usually move with reasonable rapidity.

Q. But you do not move with reasonable rapidity except in matters you have given careful consideration? A. I make up my mind very rapidly; whether my mind is right or wrong, it is almost instantly made up.

Q. Who suggested Moses Heins as a man? A. I did; I did not suggest him to anybody else; he has never been suggested.

Q. And Tichenor was suggested by Mr. Grange, you say? A. Yes, sir.

Q. Did you know anything about Tichenor at the time? A. I have known him for years; I have known him as one of the most faithful and skillful men that could be engaged in any undertaking.

Q. Especially in matters of this kind? A. Well, of course you do not employ the services of a man like Mr. Tichenor chasing honest men.

Q. Had you had any previous experience with him in this line of capacity? A. Yes, sir; very extensive experience, in cases of this character—not in tracking this kind of criminals, but other kind of criminals.

Q. Who suggested the other man to come to Sacramento with him, whose name has not been used here, who has been called Hartling?

A. I asked Mr. Corbin to have Mr. Tichenor secure a companion.

Q. Was there any communication between you and Mr. Corbin when Mr. Tichenor was here and telephoning back there that Jordan would not permit him to hand this money to the Senators in person? A. Yes, sir.

Q. Did Corbin come and give you that information? A. I am not sure whether he did it personally or over the 'phone; I received one message; I was trying the Eppinger grain case, and I was called out of court to the telephone and received one message from Mr. Corbin; I am not sure whether that message was about Jordan refusing to act until he received the other hundred, or one saying that there was no such number on Seventh street as 116 Seventh. There was one occasion where they left out a figure.

Q. Were all these communications that Mr. Tichenor testified to as having been sent by him from here on that Tuesday, communicated to you? A. I can only swear to what were communicated to me; if there were others, I do not know.

Q. You heard the testimony last evening? A. I had two communications, one on the matter of the other hundred dollars, and the other on the "no such number as was given."

Q. Was there a communication which he has testified to here last night, that Jordan permitted him to pay this money to the Senators individually, and that he wanted instructions? A. Yes, sir.

Q. That communication came also to you? A. Yes, sir; that came to me—not from him.

Q. Did it come to you from Mr. Corbin in person? A. That I do not know: I couldn't tell whether that came by telephone or whether that was made in person.

Q. Whichever way it came to you, that communication on Tuesday that he would not be permitted to pay that money in person, and he said he received an answer in twenty minutes to do his best—or use his discretion: Was there a conversation between you and Mr. Corbin in the interim of the twenty minutes with regard to that matter, as to what he should do? A. No; if I remember correctly the telephone from Mr. Corbin was that Mr. Tichenor would call him up in twenty minutes, and I was to send a message to Mr. Corbin what to do, and he would answer Mr. Tichenor when he was again called to the phone.

Q. What communication did you send to Mr. Corbin? A. I said that to tell Mr. Tichenor that provided he could get evidence on these people,

either by seeing it delivered, or evidence that could be presented in a court of justice, or words to that effect, to do his best.

Q. What instructions on the subject had been given to Mr. Tichenor when he left San Francisco? A. I can only suppose that he received the instructions that I gave to Mr. Corbin.

Q. What instructions did you give to Mr. Corbin that should be given to Mr. Tichenor governing his conduct in this matter when he came here relating to the method of the delivering of the money, so as to have evidence? What were your instructions on that subject? A. My instructions were to identify the Senators with a reception of the money; under no circumstances to transact business with Mr. Jordan in a way where Mr. Jordan alone would be responsible; that the evidence was wanted of the actual transfer of the currency on the consummation of the crime.

Q. Then you were unwilling to have this money parted with by Newell to Jordan without absolute evidence that this money was paid by Jordan to these Senators, were you not? A. Certainly so, and I stated so with great precision.

Q. Why were you unwilling? A. Why, you, as a lawyer, Mr. Cator, know that you would not be required to be here if I had done so.

Q. You have not answered my question. A. It is a matter of law. It is obvious that Mr. Jordan would have been the only one responsible; you know that there would be no evidence against these men, simply on the evidence of Mr. Jordan; he could have posed as one of the biggest bunco artists in the country, and these men could have either received this money or been perfectly innocent, and there would have been no possibility of proving either.

Q. That is your view, is it not? A. It is my view at this moment, sir, certainly.

Q. Your view is, then, that unless there has been evidence that Jordan paid this money to these Senators, that there is no case against them, is it not? A. Well, there would not be any legal case; it would simply be a moral proposition.

Q. That is, it would rest upon—— A. (Interrupting.) Yes, sir.

Q. Would it rest upon what Tichenor says, or upon what Jordan says? A. No; it would not rest upon what Tichenor says, but it would rest upon Jordan's statement, and bear out a moral conviction under the surrounding circumstances of this, that they had done this, and while it would not be legal evidence, it would be moral evidence.

Q. Was it not understood that when Tichenor left San Francisco he should insist on delivering this money himself to the Senators? A. That is so.

Q. Who gave these instructions? A. I gave that instruction to Mr. Corbin to give to Mr. Tichenor.

Q. Why did you do that? A. Why, if he could have obtained the direct delivery to them by Mr. Tichenor, Mr. Tichenor would have been in a better position, decidedly, than he would be having Mr. Jordan give it to them. Shall I state your position?

Q. No; I think I can state that in time. My position is of no importance; I am not a witness. Did you, at the time you gave that instruction, consider that it would be the only evidence which would authorize you with parting with your money? A. No; I did not.

Q. Why did you give that instruction? A. Under the rule of law

that we want the best evidence first; if we cannot get the best evidence, you know it as a rule of law we take the next best.

Q. Prior to Tichenor coming here, you did not give him instructions to take any poorer evidence than that? A. No; but when we found that was the best he could get, we took the best evidence we could get, as long as it is legal evidence. You know, Mr. Cator, if you offer evidence in a court of law, you offer the best evidence first. I would rather have had their written receipt, acknowledged before a notary public; but I could not get that.

Q. Then as a matter of fact, when Tichenor telephoned down on Tuesday that he could not carry on any such project, or be permitted personally to deliver this money to the Senators, you were so anxious to have this scheme go through, and this money left here in Sacramento, you sent word for him to do anything he saw fit? A. That is not what I testified. You said you were not a witness, but that is your testimony, and not mine. He said that he could arrange so that he could see the money delivered to them. I said that if he could see the money delivered to them in any way that would constitute proper evidence, to do that, and do it the best he could.

Q. Did he explain, in his communication, any of the detail of how he could do it? A. Oh, no; that was not explained at all. That came through Mr. Corbin. I did not have any direct communication with Mr. Tichenor at all. This was Mr. Corbin's telephone to me.

Q. When Tichenor left with this money, of course he was responsible to the parties who gave him the money, until he could furnish satisfactory evidence that it was delivered to these Senators, was he not? A. You are asking me for a conclusion of law; you are a good lawyer, why do you not draw your own conclusion?

Q. I am asking you whether that is a fact? A. That is a question of law, I would suppose. It was my conclusion until he accounted for that money, he was responsible; I should suppose so, but you are asking me for a question of law; I am not the Supreme Court, and the Court of Appeals has not yet been appointed.

Q. Tichenor occupied this relation to you, did he not, as a bailee or holder of that money, and unless he could satisfy you that he had parted with it to these Senators, that he would be held responsible for it himself—was not that his relation to you? A. He was trusted with this money for a specified purpose.

THE CHAIRMAN: It seems to the committee that you are getting away beyond the direct examination of the witness in your cross-examination in regard to what the witness testified in his direct examination, and perhaps those questions could be taken up with Mr. Tichenor in his cross-examination. We do not want to be technical, but it seems to me you are consuming a great deal of time unnecessarily. Of course the committee does not desire to stand in your way to bringing out any point you desire to bring out in the cross-examination; we want to be as liberal as possible, but wish you would confine yourself to the direct testimony as much as possible.

MR. CATOR: Of course my position at present is a very responsible one, and I have been a little bit criticised already for not going into matters in detail. You know how others look at that—they think you should go further than you do, and I do not wish to have myself laid open to the criticism of having it said I have not probed the matter far

enough. I think many of the questions I have asked—you cannot tell until you get an answer whether they would be important or not, but this last line of questions is important. The situation presents itself very acutely in regard to Mr. Tichenor's responsibility for this money, and what responsibility they held him to, because it rests entirely upon his own evidence; he alone is the man who is interested in satisfying them that he is not responsible for it to-day, and I think therefore the point to which I was now addressing myself is important.

THE CHAIRMAN: Proceed.

MR. CATOR: Q. Mr. McNab, why, if this was simply to injure the reputation of the Senators, so that they could not afterwards hold any session successfully as members of that committee in regard to your company—why was there so much uncertainty in this affidavit in regard to the "Examiner," and the committee being packed, and so forth? A. You assume an answer that I have not given. I did not limit my answer to that. I said when a condition was presented to me as was presented to me by Mr. Grange, and the suggestion of these men, it became a matter of duty; I should have done all that I did if it was within my power, regardless of any personal or professional interests that I had, whatever. I should have done it as a citizen of the State of California, and as an American. I should have thought it a patriotic duty; but coupled with that, there was also the interest that I had, but a still more important duty to perform in protecting those who were menaced unjustly.

Q. The Continental Building and Loan Association was one of those, was it not? A. It was supposed to be, on the statement that was made to me, and on information and statements that were made to me within a day or two before.

Q. Now, I am very nearly through with Mr. McNab, but I want a better answer to this question: Since you had not known these Senators personally, and had no knowledge that they were personally dishonest, and you believed, as you say, that your company was perfectly sound and solvent— A. I did not believe—I knew it.

Q. —and had report of an enemy to that company— A. (Interruptings.) No; I did not have that report; that was in the hands of the enemy.

Q. You knew of it? A. It was held by the enemy—that report.

Q. You knew of it? A. I knew that the man who made that report had said these things to me in the presence of others and various others, but I did not have his report—oh, no.

Q. Did you, under these circumstances, believe that if you submitted to an examination of the affairs of your company by that committee, the Senate of this State would permit your company to be burned up, as you say, by an incendiary, and injured and ruined, just because you submitted to an investigation of that committee? A. Judging by the kind of investigation of a party employed by the "Examiner," which inspiration, I believe, extended to the committee, nothing concerning existing conditions of this institution at the present time was contemplated; and no report on how this institution stands to-day towards its stockholders, but gropings in the remote past years, before my board of directors had anything to do with it; that was my belief, and that the whole design was to produce a report from this committee, not to be passed upon by the Senate, but to be published, with the idea of frighten-

ing stockholders of that institution, to their injury and the institution's injury.

Q. You feared such a report as that might injure you? A. I did not fear it—I knew it; that men who had their hands extended for bribes, if they were going to make an unbought report, they were not going to make an honest report, because dishonest men do not do an honest act.

Q. Then you knew it for that reason? A. No. You are asking me psychological questions, as to various thoughts in my own mind, and the objects of this thought, and that would eventuate in a conclusion and an idea. You are asking me for a fact.

Q. To sum it all up, then, you determined to not submit to any investigation by that committee? A. Not anything of the sort at all. But when a proposition—a mendacious, criminal proposition—appeared, if it had been any other committee, that I had nothing to do with whatever, I would have acted as I always did; but I am not denying that human nature entered into this matter, and that when these men presented this in that way, it may have accelerated my energy somewhat. You see I moved rapidly.

Q. Yes, sir; I think you did in this matter. Senator Emmons had brought a law suit against your company, had he not? A. I believe I stated there was a law suit pending. He is the principal.

Q. He as an attorney brought it? A. No, my understanding is that he is the principal.

Q. That is better yet. A. I use the word “principal” advisedly, since the revelations.

Q. You mean he was plaintiff? A. I do not know whether he was plaintiff or defendant.

Q. If he brought a suit, he would not probably bring it as a defendant? A. He might be a cross-complainant; there is such a thing known to pleadings.

Q. Had any other member on that committee had any friction with the company? A. Not that I ever heard of, other than this, that they determined to get ten thousand dollars—that may have created friction; I don't know.

Q. You say they never asked for it or any other sum? A. I say this proposition is based on what Mr. Jordan said. They never asked me for ten thousand.

Q. Or any other company that you know of? A. No, sir.

Q. You never heard any such suggestion as that except from Mr. Grange? A. I never heard from any people connected with the Continental that this crowd has asked money of them; I heard other things. Mr. Corbin stated that he had information of various kinds in regard to the committee, within one or two days of that, but I had not given it any particular concern; I had been engaged in other matters, and he told me something.

Q. What conversation was there between you and Mr. Corbin in regard to the effect of Corbin being required to be a witness before this committee? A. He was not subpoenaed until after this transaction.

Q. I did not mean this committee, but the Committee of Revision and Retrenchment. A. That is the one we are discussing; I was the man that made them retrench.

Q. I am asking you what conversation there was between you and Mr. Corbin in regard to Mr. Corbin being obliged to testify before that

committee if he should be subpoenaed? A. I do not know, particularly, that I had any conversation. I had no lengthy conversation with him regarding the committee until this affair had its inception on that Sunday. He stated to me that he had been informed that there was a very bad committee there.

Q. Did not Mr. Corbin state to you in substance at the same time that everything ought to be done that was possible to prevent his being called as a witness before that committee? A. Never did.

Q. What? A. Never did.

Q. No such conversation took place? A. He never told me anything of the sort. He stated to me that some one called upon him who had stated certain things in regard to this committee very much adverse to its character, and not as a whole, but as to some of its members, and I do not think—I do not remember whether he specified any particular names, but he said some of that committee were not good men.

Q. Do you recollect anything about whether there were any people in the rotunda at the time you gave this nod towards this man? A. Hardly any. It was not a nod; it was an inclination of the head, and that was the way (witness extending right hand)—in that direction.

Q. Do you expect this sixteen hundred and fifty dollars is to be an absolute and total loss to Mr. Grange, and the men who put up the money, or do you expect that your company and others will share with that loss? A. No. The company will share no loss at all. The rule of the Board of Directors of the Continental is that nothing occurs there except what appears there in black and white as to the whole nature of its transactions, on the books—not one cent of that, unless it is on the books in full and an explanation of it.

Q. You mean to tell this committee that it is your absolute belief that neither directly or indirectly will the Continental Company, or its directors or persons interested in it in any way, attempt to reimburse, in whole or in part, the persons who put up this money? A. I do not mean to say it is my belief—I mean to say it is the actual fact. I can say that as to one director; I cannot say that as to any other. I say the Continental Company will not reimburse one cent to any man on that matter, and this director will not. I cannot speak of any other, but I will state that as to this, that he never will, and there is only one other director that knew anything of this until the night before the matter came out, I think.

Q. I have only one question more: Then the sum and substance of your testimony, as I understand it, besides what we have, as to your motives for entering into this project is, that you have no knowledge personally, whatsoever, as to whether any of this money was ever paid to any of these Senators or not? A. If you will subtract from your question the sum and substance, which is a conclusion, and ask me whether I have any personal knowledge, I will answer the question directly.

Q. Have you any knowledge whatever as to what has been stated to you by Mr. Tichenor? A. None whatever; no. Oh, yes, sir, I have; I have a statement of the other witness who was present and saw the money pass.

Q. What is his name? A. I do not know whether I can pronounce it or not; he is here and will be called.

Q. You have had conversations with him, have you not? A. I have; yes.

Q. Was he also selected by you? A. No, he was selected by Mr. Tichenor. I had one or two conversations with him since.

Q. What is his name as near as you recollect? A. Hartling, I think.

THE CHAIRMAN: Hartling? A. It is phonetically that way; I cannot say that is the spelling, but it amounts to that.

MR. CATOR: That is all. I have been earnestly requested by my associate to postpone the examination of Mr. Tichenor. I would be false to their trust if I did not ask to have some other witness called at this time.

THE CHAIRMAN: Can you take up some other witness?

MR. McNAB: Yes, sir.

THE CHAIRMAN: Counsel states that Mr. Copeland desires to be here to take up the cross-examination of Mr. Tichenor. Do you expect him here this afternoon?

MR. CATOR: Yes, sir; he was here at 2 o'clock and was called away very suddenly, and he requested me, with a good deal of fervor, to let this examination go over.

MR. RALSTON: Q. Mr. McNab, who drew that affidavit?

MR. McNAB: I can't say certainly; there was a consultation in my office; Mr. Nicol was present and I was present and Mr. Corbin was present and a young lawyer in my office was present, and it was accomplished.

Q. It was drawn up in your office. A. It was drawn up in my office.

Q. By some of you gentlemen? A. The stenographer drew it up, as a result of the various discussions.

Q. So it was a composite affidavit, drawn up in your office by you gentlemen present? A. Yes, sir.

Q. Who dictated that affidavit to the stenographer? A. Well, there were two; one would write out one part of the suggestion, and another another; I could not say exactly how that was. No one man dictated all of it. You know how the matter is: They simply take it down and would arrive at the consensus of the thing.

Q. Who wrote out the part or suggested the part of that affidavit which suggested that the President of this Senate packed that Committee? A. There is no such language in the affidavit, Mr. Ralston. I know that that was very carefully revised so as not to contain any imputation on the President of this Senate, for whom I have the greatest respect, and always have. I know there is no such language.

Q. It refers to that. A. No. I beg your pardon. You will find that is not so in that sense, because it was not so intended. The theory on which we proceeded was that anything that happened before the committee, it was a result of the intention with which that Committee was appointed, but that the honorable President of the Senate had no knowledge, if he had been misled with the purposes for which he had appointed the committee.

Q. Then you state here that previous to the service of this subpoena, this affiant had been informed, and believes that the creation of such committee had been at the suggestion of the San Francisco "Examiner"? A. That is true; I believe it now; I stand for that. We all stood for that at the conference, and do now. It is my firm belief; but I did not intend, and none of us intended, any reflection on the honorable President.

Q. Then I am to understand that you and the rest of the gentlemen present believe that the committee had been created at the suggestion of

the San Francisco "Examiner" by the President of this Senate? A. I believe that the San Francisco "Examiner"—I do not mean that the San Francisco "Examiner" would go and present a committee to Mr. Anderson and be recognized—nothing of the kind. Just the same as I might be influenced and induced to do something, the purpose of which I did not know—I mean that by subterranean methods they secured the appointment of this committee. I do not think that. All of us are willing to concede that Mr. Anderson was an innocent victim of a distortion of facts as we believe they occurred; but it is very plain to any person that men take suggestions. The President of this Senate, as the President of the United States, takes suggestions; but if some suggestions are brought to him which result unfavorably, the people who had the inception of that are the people at whom that suggestion is directed, and not at Mr. Anderson. I do not think Mr. Anderson conceived, or the Senate conceived, when providing for a committee on retrenchments, that it meant to organize a predatory fishing expedition into every corporation in California, and your power does not permit them to do so, and you gentlemen as a committee to wholly determine the law, did not permit that to be done; but it is very easy to see how that could be done—the design of the committee not being known, and the law being totally otherwise. Do I make myself clear, Mr. Senator?

MR. RALSTON: Yes, sir.

TESTIMONY OF MARGARET ERHART.

Sworn.

MR. GOULD: Q. Miss Erhart, do you know Joseph Jordan? A. Yes, sir.

Q. Where do you live? A. 1116 Seventh.

Q. Did you live at that place all of last week? A. Yes, sir.

Q. And you were living there on the 24th of January, were you not? A. Yes, sir.

Q. Did you see the gentleman sitting right beside you, Mr. Tichenor, there at any time during the 24th—that is on Tuesday—a week ago yesterday? A. I saw him there, but I do not know what day.

Q. Did you see him there more than once that day? A. Twice.

Q. Do you remember the time of the day? A. The first time was about a quarter after 1; the second 25 minutes after 1.

Q. Did he come into the house at that time? A. The first time he did not; the second time he did.

Q. The second time he came into the house. Did he inquire for any person? A. Inquired for Mr. Jordan.

Q. And what answer did you give him when he made that inquiry, when he came the first time? A. He was not in.

Q. Did Mr. Tichenor then go away? A. Yes, sir.

Q. And returned about fifteen minutes later, did he? A. Yes, sir.

Q. The second time after he came did you let him in? A. Yes, sir.

Q. To what room did you direct him? A. To Mr. Jordan's room.

Q. Why did you direct him to Mr. Jordan's room? A. Because I had orders to do so.

Q. From whom? A. Mr. Jordan.

Q. When did Mr. Jordan tell you to send him to Mr. Jordan's room? A. As soon as he came.

Q. At what time did Mr. Jordan make this statement to you? Was it after his first visit there? A. Before.

Q. Before his first visit. Did he go into Mr. Jordan's room? A. Not the first time.

Q. He did the second time? A. The second time.

Q. Did he remain there until Mr. Jordan came? A. The second time he did.

Q. And he and Mr. Jordan were in Mr. Jordan's room together then after the second time that he came? A. Yes.

Q. What did Mr. Jordan tell you about Mr. Tichenor's coming there? A. That if a gentleman called, tell him to wait.

Q. If a gentleman called, tell him to wait. Did he say from where? A. No.

Q. He did not say from where? A. No.

MR. GOULD: That is all.

MR. CATOR: That is all.

TESTIMONY OF HENRY HARTLING.

Sworn.

MR. GOULD: Q. Where do you live, Mr. Hartling? A. San Francisco.

Q. How long have you lived there? A. Since 1888.

Q. Do you know George Tichenor? A. Yes sir.

Q. Did you know him during the whole of last week? A. I did.

Q. Were you at Sacramento at any time with him? A. I was.

Q. And for what purpose did you go? A. He instructed me on the boat the object of his wanting me along with him.

Q. At what time did you arrive in Sacramento, and on what day?

A. Arrived in Sacramento on the evening of the 23d—the night of the 23d.

Q. At what time? A. 10:35.

Q. Will you state what occurred after your arrival here in relation to your mission? A. Nothing occurred on the evening of the 23d, or night. The next day Mr. Tichenor informed me to wait for him at the Western Hotel, where we stopped, and he went away; he did not inform me of his mission, or what he was going to do, but he returned—I do not remember the exact time, but in the morning before 12. He says: "I am up a stump." I says: "How is that?" He says: "I have got the wrong number; they gave me 116, and I have been out, and there is no such number. I have got to find out about it." So we went together from the Western Hotel to the telephone offices. I remained on the outside, and he telephoned. I do not know who to or anything about it, but he came out, and we went up J street to Seventh from the telephone office. I believe the telephone is on Fifth or Sixth; I do not know which. Anyhow, we went up J street to Seventh street and down Seventh street toward K. He stepped into a bank, and asked some question. He did not inform me what he went in there for, but he says: "I guess I have got it right now." He says: "It is 1116." He says: "We will go down and see and locate the place." We went down to 1116 Seventh street and saw the place.

Q. Did Mr. Tichenor enter the house at that time? A. Not at that time; no, sir.

Q. Did he later? A. Yes, sir.

Q. When? A. Well, I think it was in the neighborhood of half-past 1

Q. Did he remain? A. No, not at that time; he did not go into the house. He went there and made an inquiry, and he returned to the street and I met him further up, and he says: "He is not there." He says: "I will go back again after a while."

Q. Did he go back again? A. He did.

Q. Did he enter the house at that time? A. The second time?

Q. Yes. A. He did.

Q. Where were you during the time he remained in the house? A. I was opposite, in a stable, across the way.

Q. Do you know Mr. Jordan? A. I know him now; yes, sir.

Q. Did you see Mr. Jordan go to that house at any time while Mr. Tichenor was in the city? A. I did.

Q. How long did Mr. Tichenor remain there after Mr. Jordan came? A. Well, about 10 or 15 minutes.

Q. Did they both come out of the house together? A. Yes, sir.

Q. And where did they go? A. Jordan went in the direction of L street, and up L street, and Tichenor towards K.

Q. They separated at the door? A. On the sidewalk.

Q. Came out together? A. One after the other—right together; yes, sir.

Q. Did you see Mr. Jordan at any time during that day, and after you saw him and Mr. Tichenor separate on the sidewalk in front of 1116? A. Mr. Tichenor informed me that Jordan had gone to see the Senators, and he would return, and he would bring them in one at a time—they would come one at a time, and I was to remain in that stable, or remain where I could see them come.

Q. How long did you remain there? A. Remained there? oh, half an hour, I guess, in the neighborhood.

Q. What caused you to leave the stable? A. Jordan returned. Mr. Tichenor was in the house at that time. He went in with a key that he showed me—said he had a key to go in.

Q. That is, Mr. Tichenor went into the house the second time? A. Yes, sir.

Q. And later Mr. Jordan returned; is that the way I understand? A. Yes, sir.

Q. How long did they remain there at that time? A. They did not remain very long—ten minutes.

Q. Then, what became of them after they came out? A. They separated, Jordan going the same way he went the first time.

Q. When did you next see Mr. Jordan? A. Next saw Mr. Jordan at 5 o'clock.

Q. Where? A. At the Western Hotel—near the Western Hotel, corner of Second.

Q. Was Mr. Tichenor with him at that time? A. He was.

Q. Where did they go, if anywhere? A. They walked up K street to the street that the telephone office is on, whatever street that is, and Mr. Tichenor went to the telephone office, and Mr. Jordan went on up the street. I followed along and met Mr. Tichenor later on.

Q. Where? A. At the telephone office.

Q. Where did you go then? A. Mr. Tichenor informed me then that there was a hitch in the proposition, and that he had to telegraph for instructions.

Q. Go on now, and relate the incidents. Do you know whether or not Mr. Tichenor telephoned anywhere? A. Yes.

Q. Where did he telephone? A. I do not know. I know he was in the telephone box in the office.

Q. Where did you go after you left the telephone office? A. We went—he then showed me the bills that he had, and I took the numbers of them—of the bills that he was to give to Jordan.

Q. Where was this done? A. This was on J street, the same street the telephone office is on, near the corner.

Q. On the street. A. Yes, sir.

Q. Did you take the numbers of all of the bills there? A. Of those three bills, and he also showed me the other bills he had—seven packages—or seven bills in four other packages—bundles wrapped up—rolled up; and he also showed me the initial on the lower margin in ink that he said he had made himself upon those bills.

Q. Upon how many bills were those initials made? A. One in each bundle of four.

Q. Of four bills? A. Yes, sir.

Q. Where did you then go after that? Perhaps more consecutively, when did you next see Mr. Jordan? A. Mr. Jordan met Mr. Tichenor on K street—Eighth and K.

Q. At what time of the day was that? A. Near Hanlon's saloon this was—a few minutes after 6.

Q. What day of the week? A. On the 24th of January.

Q. That would be Monday? A. That would be Tuesday.

Q. State what occurred there? A. They started off together, went down to Seventh, and went to Mr.—to 1116 Seventh street.

Q. Did they go in the house? A. They did.

Q. Remain there? A. Remained there—well, probably fifteen or twenty minutes.

Q. Did they come out together? A. Yes, sir; they came out together.

Q. Separated again? A. Yes, sir; they separated.

Q. Where did you next see Mr. Jordan after that? A. Saw Mr. Jordan on K street, near Hanlon's saloon.

Q. Was any person with him? A. Mr. Tichenor talked with him a few moments.

Q. Then what occurred? A. Mr. Tichenor left him, and he went into the saloon.

Q. Just state what followed. A. Hanlon's saloon.

Q. State what followed. A. In a short time—was not but a very few minutes—before Mr. Jordan came out of Hanlon's saloon with Mr. Emmons.

Q. Senator Emmons, do you mean? A. Senator Emmons. They walked diagonally across the street, to the corner of the same street, Seventh or Eighth and K, and there they met several people, and they talked a moment, and they went on down, accompanied by Mr. Walsh—Welch—Senator Welch of San Francisco. They went to 1109 Seventh street. They remained in there but a few moments.

Q. Went inside? A. Went inside—came out. They remained there but a little while, and they came out and Welch separated from them, and Emmons and Jordan kept together, and in front of a cigar store just above the corner to the east of Eighth street they stopped, and Mr. Jordan reached his hand in his pocket—in his right-hand pocket—and

pulled out the bills, and handed them to Mr. Emmons. Mr. Emmons put them in his pocket. They separated after a handshake.

Q. Then, what occurred next? A. Mr. Emmons went up the street, I did not know where. Jordan then crossed the street to the north side of K street. He walked down the street and he met Mr. Tichenor. They had a few minutes' conversation. Mr. Jordan then went up K street, between—up between Ninth and Tenth—I do not know—with Mr. Tichenor, and then Mr. Tichenor left him, and he was joined then by Senator—Jordan was joined then by Senator Bunkers.

THE CHAIRMAN: Q. State, if you can, what was your relative position as to Mr. Tichenor and Senator Emmons when you saw the money pass? A. To Mr. Tichenor?

Q. Your relative position as to both Senator Emmons and Mr. Jordan when you saw the money pass—how far away? A. I was thirty or forty feet.

Q. On the same side of the street? A. On the same side of the street.

Q. Was Mr. Tichenor in the immediate vicinity? A. I think he was on the opposite side of the street. I saw him over there a few moments before that, but I was watching these people at that time.

Q. You say you were thirty or forty feet away? A. Yes, sir; I was at the corner—right at the corner.

Q. Of what? A. Eighth and K, and this cigar store—whatever distance that is above, I could not say—say thirty or forty feet; it is not more than that; may be not so far.

Q. At what time of day was this? A. This was after 6—about half-past six.

Q. You are positive that it was Senator Emmons who was with Mr. Jordan? A. I know him well.

THE CHAIRMAN: That is all.

MR. GOULD: Q. You stated that you saw Senator Bunkers join Mr. Jordan further up the street? A. Yes, sir.

Q. State what occurred between Senator Bunkers and Mr. Jordan at that place, if anything? A. They walked down to the corner of—this was between Eighth and Ninth on K that they met. They walked down to the corner of Eighth and K, just around the corner, a few feet at the edge of the sidewalk, in front of the American Tea Company's store, or American Cash store.

Q. Go on and state what took place there at that time? A. Their relative positions was—Bunkers was standing with his back towards the street, and Jordan was standing with his back towards the building; that is, not exactly in that shape, but nearly so.

Q. Go on. A. I saw, then, Mr. Jordan reach into his pocket.

Q. Which pocket? A. In his inside coat pocket, and pass the bills right out to him, and Mr. Bunkers took them and put them in his pocket—his inside coat pocket.

Q. Passed them out to whom? A. To Bunkers.

THE CHAIRMAN: Q. Pass the bills out to Senator Bunkers? A. Yes, sir.

MR. GOULD: Q. Was there any covering on those bills at all—paper wrappings on those bills at all? A. None at all.

Q. State what next occurred. A. Mr. Jordan then joined Mr. Tichenor. I followed, and shortly Mr. Jordan left Mr. Tichenor at the corner of Seventh street, near the Golden Eagle Hotel. I rejoined Mr. Tichenor,

and Jordan left, and he said he was going to find the other two Senators. That is what Mr. Tichenor informed me, and so to be on the lookout.

THE CHAIRMAN: Q. Did he mention the names of the Senators? A. Yes, sir.

MR. GOULD: Q. What Senators? A. Senators French and Wright.

MR. RALSTON: Q. Did you know Senator Bunkers? A. Yes, sir.

Q. Had you met him before this, so that you knew him? A. Yes, sir.

Q. At what time of day was this that this money was passed to Senator Bunkers, as claimed by you? A. It was not any more than fifteen or twenty minutes after it was passed to Emmons.

Q. At what time of day was that? A. Well, it was in the neighborhood of twenty minutes, I should judge, to seven o'clock.

Q. Twenty minutes to 7 o'clock? A. Yes, sir.

MR. GOULD: Q. That is, you mean when the money was handed to Bunkers? A. To Bunkers. It must have been about half-past 6 when it was passed to Emmons.

MR. RALSTON: Q. You say he handed the money to Senator Emmons and Senator Bunkers. How do you know it was money? A. Only that I could see the bills. They were greenbacks.

Q. You could see the bills? A. I could see the bills.

Q. You could identify bills forty feet away? A. I think so.

MR. GOULD: Q. Did you see Mr. Jordan at any time later than this on this same day? A. Mr. Jordan returned and met Mr. Tichenor at the Golden Eagle Hotel, and they had a conversation. Mr. Jordan again left. I then joined Mr. Tichenor, who said he had not found them yet, but he said that Jordan told him that they would be around very soon. I watched there for some while, and again Mr. Jordan returned, and had conversation with Tichenor, and afterwards left him. Mr. Tichenor joined me and told me that there was a committee meeting going to be held at 817 Tenth street, and that Jordan would there meet the other two men, Senator French and Senator Wright, and we then went across—took a walk around there to locate the place. We went up there, and located it. He said that the meeting was to be called, or that they were to be there at 7:45. We were there on time, Mr. Tichenor remaining at the corner of the Park and I street, and I went down opposite the house—817. The first person to come there that evening was Senator Emmons—the first person that I saw go into the house. Other people, from where I stood, I could not identify that went in at that time.

Q. How long did you wait there? A. I waited there until a quarter after 8—8:15—and then saw Mr. Tichenor talking to Mr. Jordan at the corner above. Mr. Jordan went into the house after his talk with Mr. Tichenor. I joined Mr. Tichenor, and Mr. Tichenor informed me that Jordan had told him that Senator French was to come outside first, and he was to pay him the money on the outside, and then he would bring out Senator Wright. We then separated, and shortly—it was not very long before Jordan came out of the house, and he joined Mr. Tichenor. I followed along. They separated. I joined Mr. Tichenor again after they separated, and he then informed me that he would probably be—he would see them at the Golden Eagle Hotel at 10 o'clock; that they were busy there, and that he could not get them. At the appointed time, at 10 o'clock, we were there at the Golden Eagle Hotel, but failed to see Mr. Jordan. We waited there until 11, or a little after 11.

Mr. Jordan came, and talked with Mr. Tichenor. They had considerable talk—quite a long time—15 or 20 minutes, I think. They walked down K street towards Sixth—near Sixth—near the corner of Sixth street, Sixth and K. I was right behind them—within 15 or 20 feet. They stopped, and while they stopped Mr. Tichenor handed Mr. Jordan bills. They then separated, and Mr. Tichenor informed me that he had to get Jordan another hundred dollars. He said he was to meet Jordan at 12 o'clock. He said that Jordan told him that he had already paid the money over to Senators Wright and French. They separated; I do not remember now whether they separated then or walked up to K street. Anyway, I joined Mr. Tichenor afterwards; and Mr. Jordan, I don't know where he did go after that, and Mr. Tichenor informed me that he was to meet Jordan at 12 o'clock to give him the other hundred dollars. Mr. Tichenor got on the car and left—went to the depot. He returned, and showed me the bill that he had. I took the number—the hundred dollar bill, and at the appointed time we were there at 12 o'clock to meet Jordan. Jordan did not show up until, I think, it was 25 minutes after 12. They walked together to the barber shop in the Golden Eagle Hotel—between the barber shop and the cigar store. I was right behind them, and I saw Mr. Tichenor give him this bill, or a bill. Then they separated—oh, no, they went across the street to a saloon. After being in there some half an hour or twenty minutes they came out and shook hands, and I joined Tichenor afterwards. That is all I saw.

MR. GOULD: Take the witness.

Cross-Examination.

MR. CATOR: Q. How long after you saw this money handed to Senator Bunkers was it before you walked up to the place where you expected to find the Senators—was that 817 J street? A. How long after that?

Q. Yes; how long after you saw the money handed to Senator Bunkers, as you have stated, was it before you arrived at 817 K? A. Yes. That was before. It was along about 7 o'clock—a quarter to 7 when we went up there the first time.

Q. You said that Tichenor said they were due there at 7:45? A. 7:45.

Q. And you said in your direct examination you were there on time? A. Yes, sir.

Q. You were there on time when you arrived? A. Yes, sir.

Q. It was not past 7:45 then? A. We looked at our watch before we started, and we were there ahead of time.

Q. How much ahead of time? A. Maybe five minutes ahead of time.

Q. At five minutes before 7:45? A. Yes, sir.

Q. You walked directly up there, did you? A. Yes, sir.

Q. How far was it from where the money was paid to Bunkers to the place where you went—to 817 K street? A. The money was paid to Bunkers—

MR. SIMPSON: Was there any mention made of 817 K street?

MR. CATOR: Seventh street.

THE WITNESS: Tenth street.

Q. 817 Tenth street? A. I do not understand that question.

MR. CATOR: Just read it. [Question read.] A. About six blocks.

Q. About six blocks? A. I should judge.

Q. Were the lights lighted when this transaction occurred on the street? A. Yes, sir.

MR. GOULD: Do you mean the street lights?

MR. CATOR: The street lights. A. Yes, sir.

Q. Was that Tuesday evening a cloudy or a clear afternoon and evening? A. It was cloudy.

Q. You looked at your watch then at this time when you went to 817 Tenth street? A. Yes, sir.

Q. How long before that was it when you had looked at your watch before? A. Well, we had our lunch—had lunch right after we came back from 817.

Q. That was afterwards? A. After we went there the first time to view the place.

Q. Then you did not look at your watch when Emmons and Jordan came out of Hanlon's saloon? A. I think I did.

Q. Do you know whether you did or not? A. Yes, I know that I did.

Q. What causes you to remember that now? A. Well, I was there for that purpose.

Q. How is it if you were there for that purpose and looked at your watch, that in your direct examination you spoke of it being about such a time? A. Well, my watch may have been wrong; it is frequently; it is a cheap affair.

Q. And so in stating that it was about half-past 6 you were not guessing at it; you give the time you observed by your watch? A. No; generally my watch is not more than 5 minutes out of the way.

Q. What was the time by your watch, if you looked at it and saw? A. It was 6:30.

Q. And that is the time you gave in your testimony? A. Yes, sir, 6:30.

Q. Why do you say, if it was 6:30 by your watch—and that is the time you gave—why do you rather guess at it than give the time by your watch, and say your watch may be wrong? A. I stated as a fact that it is about 6:30.

Q. Is it not a fact that you did not look at your watch? A. (Interrupting.) It is not a fact; I did look at the watch.

Q. From the time you came from Hanlon's saloon until you went up to 817 Tenth street? A. I did look at my watch.

Q. And you fix the time at 6:30? A. I do.

Q. That is the time they came out of Hanlon's saloon? A. Yes, sir.

Q. Then they came out and walked a little ways and met several people? A. Yes, sir.

Q. And talked with them? A. A few moments.

Q. And then Senator Welch went with them how far? A. Went a very short distance; I think it is four or five doors; it is 1109.

Q. And how long did they remain there? A. Not very long; a few minutes—five minutes, I should judge.

Q. Five minutes? A. Yes, sir.

Q. That would make it about 6:40? A. No, I think not.

Q. Do you think ten minutes elapsed from the time they came out of Hanlon's saloon until they came out of the other saloon? A. I don't think so.

Q. How much time do you think? A. Do not think they were there over five minutes.

Q. How much time did it take for them to meet and talk with these

people before they went over there? A. They just stood and talked a few minutes.

Q. If you add a few moments to five minutes how much do you add? A. How long would it take to pass the time of day and pass on? I don't know. You can judge that yourself. I am no judge of that.

Q. Do you think it was not 6:40 when he and Emmons came out of that saloon? A. No, I think not.

Q. Did you look at your watch again? A. I looked at the watch when the money was paid, afterwards.

Q. Why didn't you state that in your direct evidence? A. I don't know why I did not.

Q. At the time you say that the money was paid you looked at your watch? A. At 6:35.

Q. At 6:35? A. Yes, sir, about that.

Q. About that? A. I should judge. I would not be sure about that.

Q. I was about to ask you if you could be sure of it? A. I would not be sure whether it was 6:35 or 6:40; it was in that neighborhood; I looked at it hurriedly. I do not remember now at this time.

Q. Did you look at your watch for the purpose of fixing the time? A. Yes, sir.

Q. If you were there for that business specifically, to fix the time, how is it that you did it hurriedly, and cannot remember? A. I don't remember it now.

Q. That was a part of your purpose and business to remember it, was it not? A. It was.

Q. And yet you did it hurriedly, and made no note of it? A. Yes, sir.

Q. That is true, is it? A. Well, I made a note of it in this way: it was between 6:45 and half past.

Q. Between 6:45 and half-past? A. Yes, sir, I am positive of that.

Q. How long was it from the time that you looked at your watch until Bunkers was paid? A. Well, Bunkers was paid, I think near 7 o'clock.

Q. Did you look at your watch then, too? A. Afterwards.

Q. Well, you did it for the same purpose, to fix the time? A. Yes, sir.

Q. Made no note of it? A. Yes, sir.

Q. When did you make the note? A. Afterwards.

Q. Where is it? A. I do not know where it is now. I may have it here.

[Here the witness takes a small memorandum book out of his pocket and looks at it.]

Q. Have you any doubt as to where you made the note as important as that for that purpose? A. (After looking further at the memorandum book.) I did not make a note of the time there of the payment to Bunkers.

Q. Did you make a note of the time Emmons was paid. A. I did.

Q. Is it in there? A. Yes, sir.

Q. Read it, or let me see the book; point it out to me. A. No, I did not make a note of the time that he was paid. I made a note of the time they left Hanlon's saloon.

Q. What time is that? A. 6:30.

Q. That is the only note you have got? A. That is the only note that is there.

Q. You say you took your watch out on both these other occasions because you thought time was important? A. Yes, sir.

Q. You made no note of it? A. I made no note of that.

Q. Bunkers was paid within fifteen minutes of the time that Emmons was, was he? A. Yes, sir.

Q. Can you make it any closer than that? A. No.

Q. And then you walked directly up, six blocks about, to 817 Tenth street? A. Yes, sir.

Q. And then it was 7 o'clock and 40 minutes, was it? A. No, sir; it was not.

Q. Didn't you testify a few moments ago that you were due there at 7:45? A. I did.

Q. And didn't you state you got there five minutes before time? A. I did.

Q. Would not that make it 7:40? A. No, sir.

Q. What would it be? A. I said at 6:30 that Emmons was paid.

Q. I am not talking about when Emmons was paid. A. You are talking about a quarter to 8, and I am talking about a quarter to 7. You are an hour ahead of time.

Q. Didn't you testify here that you were due at 7:45 at 817 Tenth street? A. Yes, sir.

Q. Did you testify you arrived there five minutes before time? A. I did.

Q. Would not that be 7:40? A. Yes, sir.

Q. Didn't you testify you walked directly from where Bunkers was paid, about six blocks, to 817 Tenth street? A. Yes, sir.

Q. Then my analysis of your goings is correct as to time, is it not? A. No, sir.

Q. Why not? A. At 6:40 we had nearly an hour from 6:40 until 8:45—or 7:45. We had an hour's time between the time that Bunkers was paid until the time that we had to go to 817.

Q. Did it take you that hour to walk those six blocks? A. It did not.

Q. Didn't you testify you walked directly from where Bunkers was paid to 817 Tenth street? A. I did.

Q. If you walked directly there, and got there at 7:40, what do you mean by it? A. We walked to town again. After we located the place we returned to Eighth and K.

Q. You testified it was 7:40 when you got there? A. I do not understand you, or you do not understand me, is one thing certain.

Q. I am stating your testimony. A. I am trying to give you the best that I can.

Q. I will leave it where it is.

MR. GOULD: Q. Did you go there twice? A. Yes, sir; I went there twice, as I am trying to tell him.

Q. The first time to locate the place? A. The first time to locate the place.

Q. The second time to keep the appointment?

MR. CATOR: Q. I am speaking of the time you went there after the time that Bunkers was paid? A. So am I.

Q. Had you been there before that? A. No, sir.

Q. That was the first time you went? A. Yes, sir.

Q. What do you mean by saying it was 7:40 o'clock; you said it was 7:45 when you were due there? A. I am trying to tell you, Mr. Cator.

Q. I am listening. A. It was 6:40, or about that—6:40, you remember. We then went after that up to this place, which took us but fifteen or twenty minutes to go there and back again.

MR. GOULD: Q. And then? A. And then we went and had a lunch, and then right after our lunch we went up there, and it was nearly the time—nearly 7:40.

MR. CATOR: Q. Then this 7:45 was the time you were due there—the exact time? A. Of course. I am trying to explain it to you.

THE CHAIRMAN: Q. As I understand it, 7:45 was your appointment there? A. Yes, sir; 7:45 was our appointment there.

Q. With Mr. Jordan? A. With Mr. Jordan.

MR. CATOR: Q. How came you to go directly from the place where Bunkers was paid if you had an appointment at 7:45? A. I have told you repeatedly we went there to locate the place, to see what it looked like—locate it.

Q. And then you looked at your watch, did you? A. Yes, sir.

Q. About five minutes before the time? A. No, sir. What is the matter with you?

Q. Five minutes before 7:45. Didn't you say it was five minutes before the time you were due? A. That is the second time I was there.

Q. I am talking about the second time you were there. A. You were talking about the first time a moment ago.

Q. I am talking now about the second time. You say that was about 7:40? A. Yes, sir; 7:40.

Q. You looked at your watch then? A. Yes, sir; 7:40.

Q. Who employed you to aid Mr. Tichenor in this matter? A. Mr. Tichenor himself.

Q. Where? A. In San Francisco.

Q. When? A. On the afternoon of the 23d—Monday.

Q. How long had you known him? A. I never had knew him before that day.

Q. How came you to know him then? A. I was told that they wanted me at the Continental office. I went there and met Mr. Tichenor.

Q. Who told you they wanted you at the Continental? A. A man by the name of McFarland.

Q. Who is he? A. He is a gentleman in San Francisco.

Q. What is his business? A. Detective.

Q. Whom did he say wanted you at the Continental; just said "they?" A. "They." "You are wanted hastily at the Continental."

Q. When you went there whom did you ask for? A. I asked for Mr. Corbin.

Q. Did McFarland tell you to ask for Mr. Corbin? A. No.

Q. Did you know Mr. Corbin. A. Yes, sir.

Q. Had known him before? A. Yes, sir.

Q. How long? A. I have known him in a business way for a year or so.

Q. Did you meet him then? A. Who?

Q. Corbin? A. Yes.

Q. What did he say to you? A. He told me to stay around there, he wanted to see me later on.

Q. How long afterwards did he see you? A. I waited until about 6 o'clock.

Q. Did you see him then? A. And Mr. Tichenor came. He introduced me to Mr. Tichenor, and he says—he did not introduce me—he says: "You go along with this man." I did not know where I was

going to until I got down to the ferry and found I was going to Sacramento.

Q. Whom did you understand was employing you? A. Mr. Tichenor.

Q. Didn't you understand that Mr. Corbin was the man you were to look to for pay? A. No, sir.

Q. Why is it, then, that you had orders from Mr. Corbin to go along with him if he was not your employer? A. A gentlemen wanted to see me there later on.

Q. What was the nature of the talk between you and Tichenor? Where did Tichenor take you to? A. There was no talk at all. He says: "Come along with me."

Q. Where did you go? A. Went to the ferry.

Q. Did he tell you anything between there and the ferry about where you were going? A. Did not tell me until we got to the ferry.

Q. What did he tell you when you got to the ferry? A. Told me we were going to Sacramento about a matter.

Q. Did you ask about the nature of your employment in the matter? A. Not at that time.

Q. Did you ask who was going to pay you? A. He asked me what I expected, as to what I was going to charge, and I said it depended on the work to be done.

Q. Was there any specific contract made as to the work? A. No, sir.

Q. You understood he would pay whatever was right? A. Yes, sir.

Q. You have been in this business before? A. Yes, sir.

Q. You got on this ferry-boat? A. Yes, sir.

Q. When did he first reveal to you the nature of what he wanted of you? A. On the boat.

Q. What did he say? A. He said that he had some money—bills to distribute amongst some of the Senators, and he wanted me to witness the transaction.

Q. Did he state in what manner he wished you to witness it? A. He told me the names. He discussed to me about what would be best to do—that is, if we could locate ourselves in the house where the money was to be paid. That was the understanding.

Q. You talked over the project, and concluded that it would be the best way if you could do it? A. If we could do it, yes.

Q. To locate yourselves in the house? A. Yes, sir.

Q. In what house; where the money was to be paid? A. I did not know anything about that at that time. He asked me if I knew Jordan. He did not reveal anything to me at all about what it was to be.

Q. Except that you were wanted to witness the payment of the money to the Senators? A. Yes, sir.

Q. You understood then that you were to witness the payment of the money to the Senators? A. It was.

Q. Did he state who was to make the payment at that time—who expected to make it? A. Yes, sir.

Q. Who? A. Jordan.

Q. He told you then that he expected Jordan to make the payment? A. Yes, sir, in his presence. That was his understanding of it then. He was to be present when the money was to be paid by him to Jordan.

Q. To the Senators? A. Yes, sir.

Q. You understood from him that he expected Jordan to pay this money to the Senators? A. I did not understand that exactly. He

was to be there when the money was paid, and whether he was to pay it to Jordan, and Jordan to them, I do not know what that was, but I was to see that the money was to pass to the Senators.

Q. The details of what you were to do were talked over carefully, were they not? I have related to you, as near I can, what transpired between him and I.

Q. Does not business of that character between two detectives generally require being talked over very closely as to the details? A. Sometimes. This was not very extensively.

Q. This was not talked over? A. We talked over what was to be done, to locate myself in the house in a room, and see the payment of the money. It did not take long to transact that.

Q. And to see Jordan pay it? A. I do not know whether to see Jordan pay it; I suppose that was the transaction; I don't know about that.

Q. Did he say anything to you about wanting to pay the money himself? A. No.

Q. Did he say anything to you about any instructions he had in regard to paying this money in person? A. He said his instructions were that we were to see, if we could, the payment of the money.

Q. See what? A. The payment of the money to the Senators.

Q. Didn't say he had instructions to pay it in person? A. No, sir.

Q. Didn't say that to you? A. No, sir.

Q. Anything more said about it than that until you got to Sacramento. A. No.

Q. That was all that was said about it? A. Yes, sir.

Q. When you arrived here, where did you go? A. Went to the Western Hotel.

Q. And after he found that he had not got the place, and did the telephoning, did you know the nature of any of the communications he sent to San Francisco? A. The only thing I know is what I have related, that after he returned—he had been gone—told me to wait for him, and he returned and says he is “up a stump, there is no such number as 116.”

Q. Did he tell you that Jordan had told him that he could not pay this money himself, and that he had told Jordan that the matter would have to be considered off? A. Yes, sir.

Q. Told you that? A. Yes, sir.

Q. Where? A. That was after he had walked up—after Jordan had met him at 5 o'clock at the corner of Second and K. Jordan walked with him up K towards the telephone—towards Fifth—I guess it is Sixth street—where the telephone office is, anyway, and they separated, and Jordan went up the street, and Tichenor towards the telephone office. I met Tichenor, and he told me that the proposition was, he had to get another hundred dollars; that was it, at that time.

Q. I refer to the man's saying that the matter was off, because he could not pay the money in person? A. That was after Jordan had returned, and Tichenor told me that they would not consent to his being present.

Q. Then he went to the telephone after that? A. Yes, sir.

Q. Did you and he discuss that matter any further in detail, as to what the result of that would be, their not allowing him to pay the money in person? A. Well, he says to me—he says: “I don't know; I do not

want to do anything of that kind; I want to see that the money is paid, or it don't go with me. I have got to have instructions."

Q. What did you say about that? A. I had nothing to say.

Q. Did you express any opinion to Tichenor at all? A. I did not.

Q. On the subject as to whether that would go or not? A. I did not.

Q. What did he say later about instructions? Did he tell you he had got any other instructions later? A. Yes.

Q. When was that? A. That was after he had telephoned.

Q. What did he say he had got? A. He said that he had been given instructions to—as long as we—to do the best he could as long as he could see it.

Q. To do the best he could as long as he could see it? A. That is, payment of the money.

Q. Where were you when he told you that? A. After he left the telephone office, walking along. I do not remember now.

Q. Did he ask you what had better be done under that suggestion? A. No.

Q. Did not consult with you as to what he thought was better to be done? A. No, sir.

Q. Did not advise with you, as a detective in an emergency, as to what was the best plan? A. No, sir.

Q. He was managing it without consultation with you? A. Yes, sir.

Q. Did not give you instructions? A. No, sir.

Q. Did he tell you where he intended to stand in relation to this matter? A. No, sir.

Q. Did he tell you where he wanted you to stand in relation to it? A. He told me to get as near as I could and see the paying of the money. That was my instructions. It is as much as I can do to take care of myself.

Q. There were no details between you and him beyond that as to your relative positions when this money should be paid? A. No, sir; that would be impossible.

Q. What would be impossible for you to arrange more definitely—— A. (Interrupting.) Circumstances sometimes alter cases.

Q. And all that was said about it was that you should be as near as possible? A. Yes.

Q. And no positions were agreed upon between him and you except this? A. No, sir.

Q. Did you see where Tichenor was standing when you stood at the corner of Eighth and K? A. No, not at the time; no.

Q. You did not see where Tichenor was until after Jordan went over to him? A. Yes, sir. I saw him right after Emmons—after they separated I looked for him.

Q. But before Emmons was paid you did not look to see where he stood? A. No.

Q. Were Tichenor and you standing together when Emmons came out of Hanlon's saloon? A. No, sir.

Q. How long before that had you separated? A. At that time we had been separated some little while. Jordan kept running back and forth, and of course I made myself scarce when Jordan was around with him.

Q. You tried to keep where Jordan would not see you? A. Yes, sir.

Q. That you considered necessary, did you? A. I did.

Q. Considered it a necessary part of that work to keep far enough

away so that Jordan would not observe you? A. When he was with Tichenor.

Q. Did you know that Emmons was in Hanlon's saloon before he came out? A. No, I did not.

Q. How near to the door of Hanlon's saloon were you when Emmons came out? A. I was right across the street.

Q. Right in front of it? A. Across the street.

Q. In front of Hanlon's saloon? A. Yes, sir.

Q. You knew that Jordan had gone in there? A. Yes, sir.

Q. But you did not know that Emmons was in there? A. No.

Q. Where is Hanlon's saloon in reference to Eighth and K? A. Hanlon's saloon is on the northwest corner of K and Eighth.

Q. Northwest corner of K and Eighth? A. Yes, sir.

Q. Right out here below? A. Yes, sir.

Q. You stood then on the south side of K street? A. When they came out?

Q. Yes? A. Yes, sir.

Q. What position did you maintain when they met Senator Welch and others? A. Well, when they started off, they started as if they were going up Eighth street—made a few steps that way, and I started across the street.

Q. That is to go towards Hanlon's saloon? A. No; going up.

Q. Going up K street? A. Going up K street.

Q. On the side opposite from them? A. And I saw that they were coming right across towards me, and I knew that Emmons knew me; and there was a tree there, and I kind of stepped behind that tree, and they passed down there.

Q. Went down to where? A. To 1109.

Q. That was another saloon? A. With that gentleman behind you, Mr. Welch.

Q. Was that a saloon? A. I do not know what it is. I never was in there.

Q. You waited till they came out? A. Yes, sir.

Q. Where did you wait until they came out? A. I was right on the sidewalk.

Q. On the same side of the street? A. On the same side of the street.

Q. That is on the south side? A. Yes, sir—no, on the east side.

Q. I am mixed up here in Sacramento? A. So am I.

Q. That is, you were on this side? A. Yes, sir.

Q. On the side nearer the Capitol? A. Yes, sir.

Q. That is the east side in Sacramento? A. Yes, sir.

Q. And the other side is the west side? A. Yes, sir. This side is the east side—that is, toward us.

Q. The side of the street that the State House Hotel is on is the side you call east? A. No, south.

Q. I called that south? A. I should judge that K street is east and west, and the numbered streets are north and south, is the way I should judge.

Q. The State House Hotel is on K street, is it not? Is not that the street that the cars run to? A. The State House? I do not know where that is.

MR. GOULD: Do you mean the State House or the hotel?

MR. CATOR: The hotel.

THE WITNESS: It is on the corner of Tenth and K.

Q. I want to know whether I am misled as to my knowledge of streets. Is not the street that the Golden Eagle faces the long way and the State House faces the long way, K street? A. Yes, sir.

Q. Then you stood on K street on the south side? A. Yes, sir.

Q. When he came out of Hanlon's saloon? A. Yes, sir.

Q. Then I was right when I said you stood on the south side? A. Yes, of K street.

THE CHAIRMAN: You said Eighth street.

MR. CATOR: K and Eighth at a little distance might sound the same.

THE CHAIRMAN: I understood you to say Eighth street?

MR. CATOR: Perhaps I did.

Q. When this party mentioned, and the other party, came out of 1109, you still stood on the south side?

THE CHAIRMAN: He testified it was 1109 Eighth street.

MR. CATOR: Q. This saloon that they went into after they came out of Hanlon's was on Eighth street? A. It was on Eighth street; yes, sir—on the east side of Eighth street, between K and L. You go up a few steps.

Q. They passed you? A. Yes, sir.

Q. Came further this way? A. Yes, sir.

Q. When they came back on to K street out of that saloon, did they pass you again? A. Yes, sir.

Q. Where were you when they passed you on the way back? A. Right there on the edge of the sidewalk.

Q. You stood behind the tree? A. No, not behind the tree; by the side of the tree.

Q. You used the tree to shield you again? A. Not particularly; I stood there; it was convenient.

Q. The street lights were lighted? A. Yes, sir. It was not very light at that particular place.

Q. They passed over on to the north side of K street, did they? A. They did not. They turned the corner.

Q. And went up to a cigar store? A. In front of a cigar store on K street, just above the corner, on the south side of K street.

Q. And you saw this transaction occur at that place? A. I did.

Q. Then, it was on the south side of K street? A. It was on the south side of K street. Q. In front of a cigar store? A. Yes, sir.

Q. The first cigar store that is above Eighth street on K? A. Well, I don't know. I think there is another little store, or something—don't know whether it is a cigar store or what it is; there is quite a large store there—a good many lights.

THE CHAIRMAN: I have got a little chart drawn of that, as we understand it. [Indicating on drawing.] This is K street running east and west. This is Eighth street running north and south. Hanlon's saloon is here? A. Yes, sir.

Q. You saw them come out of Hanlon's saloon. Take a pencil and point which way they went on the street? A. I was standing right here when they came out.

Q. You were standing there? A. On this corner. They came out of the saloon door, and they started as if they were going here, and then thought they were going up the street, and I started across at the same time to keep up with them, and when they got a few steps off, they

turned off here, and I almost jumped into them; and there are a few trees here, and I went here. [Indicating on the drawing.]

Q. They went where? A. They met Martin Kelly and this other gentleman, and walked down a short distance to that place, and they went in there, and did not stay but a very short time, and came out, and I was still there.

MR. ALEXANDER: Q. I wish you would locate that. Locate that tree, if you will.

THE CHAIRMAN: Q. Approximately? A. I cannot do it, exactly.

Q. That is the corner store. A. The outer edge of the sidewalk was here?

Q. Yes. A. I should judge it was down about here some place.

MR. SIMPSON: Q. Put a cross there. A. About in there. I do not know whether there is one or two; it seems to me there is more than one.

MR. RALSTON: Q. It don't make any difference if there were fourteen. A. I did not pay any attention to that.

MR. ALEXANDER: Q. You were standing by that tree as they came out? A. Yes, sir.

THE CHAIRMAN: Q. Where did they go? A. They came out and went around here. It was somewhere—well, I stood about there, approximately; that is about where they stood, right in there.

Q. Where were you? A. I was right here on that corner.

MR. ALEXANDER: Q. Right next to the corner of the building?

THE CHAIRMAN: Q. [Indicating on drawing.] This is Emmons and Jordan? A. Emmons and Jordan. Now I do not know the distance there. You can measure it. I can measure it myself. It is not but a short distance.

Q. Approximately? A. Thirty feet, I should judge, or twenty-five.

MR. SIMPSON: Q. Will you pace that off the next time you get a chance? A. I did not. I will do it. Emmons walked up this way, and Jordan walked across the street and down here, and he met Tichenor here on the north side of K street, above Eighth.

THE CHAIRMAN: Q. That is above that tea store? A. Yes, sir.

MR. GOULD: Q. That will be east of Eighth? A. Yes, sir.

THE CHAIRMAN: Well? A. They walked together up here, Jordan and Tichenor.

Q. Up towards the Clunie Opera House? A. Up that way.

Q. Well? A. Let me see.

MR. CATOR: Q. I think you better let the witness take his seat. I understand about the geography of that.

THE WITNESS: Anyway, Bunkers came along, and Tichenor had to leave Emmons at that time, because Bunkers was coming.

THE CHAIRMAN: Q. Where did Bunkers go? A. Came to join Jordan up, here, and went down the corner, here.

MR. ALEXANDER: Q. You said this place where they were standing is in front of a cigar store. There is a cigar store here and a peanut stand here. A. Something there.

Q. This place where they stood is in front of a cigar store? A. Quite an establishment.

Q. And they stood where, next to the building? Which way was Emmons facing? A. Emmons was facing towards me.

Q. And Jordan had his back towards you? A. Yes, sir.

MR. RALSTON: Q. No. 1 we will say is Hartling, No. 2 is Jordan, and

No. 3 call Emmons. I will locate these things so we will know where we are at. [Indicating on the drawing.] No. 1 stood here? A. Yes, sir.

Q. 2 and 3 came out of Hanlon's saloon, there? A. Yes, sir.

Q. 2 and 3 crossed then over to this point, here? A. No.

THE CHAIRMAN: Q. To there? A. Yes, sir.

MR. RALSTON: Q. Then they walked along to here? A. No, sir.

Q. Then they met these other men and came down to here? A. Yes, sir.

Q. So 2 and 3 went in here? A. Correct.

Q. That is the way they went first? A. Yes, sir.

Q. And you come across the street and stood here? A. Yes, sir; while they were here they passed me on the way down.

Q. No. 1 stood there? A. Yes, sir.

Q. When they passed on the first time, going down there? A. Yes, sir.

Q. Then 2 and 3 passed out of here and walked up here, and around this corner to here? A. Yes, sir.

Q. 2 and 3 met here, then. You (No. 1) came up and moved to this corner? A. Yes, sir.

Q. And you stood here? A. Yes, sir.

Q. That is correct? A. Yes, sir.

Q. No. 1 came from here to here. That is your first trip, and then here to the corner was the second trip? A. Yes, sir.

Q. Then 3, being Emmons, walked up K street? A. Yes, sir.

Q. 3 went up here in that direction? A. Yes, sir.

Q. 2 walked across the street? A. Yes, sir.

Q. Over to here? A. Yes, sir.

Q. That is Jordan. 2 walked over to here? A. Yes, sir.

Q. And met Tichenor? A. Yes, sir.

Q. Which is "T." So 2 met T. there? A. Yes, sir.

Q. Then they went where? A. They walked up the street together.

Q. Walked up K street together? A. Yes, sir.

Q. How far? A. Well, I am not able to tell.

Q. About? A. A hundred or two hundred feet.

Q. 2 and T. walked up here together? A. Yes, sir.

Q. Then what? A. I saw Tichenor break away from him and come back.

Q. 2 and T. stopped there together? A. Yes, sir.

Q. And then Tichenor went which way? A. Back this way.

Q. Tichenor went back this way, along the sidewalk to where? A. I do not know.

Q. Where did you meet him next? A. Then Jordan came with Bunkers. Jordan met Bunkers up here when Tichenor left.

MR. ALEXANDER: Q. Did you have any conversation with Tichenor between the time you say you saw payment to Emmons and the time you say you saw payment to Bunkers; between those two times did you have any conversation with Tichenor? I would like to have that question answered. A. (After question read by the reporter.) Yes, I did. I remember now that I did. I remember now that I made a mistake in that regard. I met Tichenor after the Emmons affair.

MR. CATOR: Q. Now I ask you the question: Was it the first or second cigar store that this money was paid in front of? A. Well, if it is a cigar store, there is a little store on the corner, and there is a larger one above, towards this way—east—now I do not know exactly; there is a

large cigar store there, quite well illuminated—quite a number of lights there.

Q. How many buildings was it from the corner? A. I do not know—about twenty-five or thirty feet. I do not know how many buildings they have got in that distance here.

Q. It was in front of a large cigar store? A. It was quite a store. I did not take any particular notice of it.

Q. Did you make a note of the number of it? A. No.

Q. Why not? A. I did not see any number there. I looked at the store, and it has got a big large cigar advertisement in front, and I know that I could identify it at any time necessary.

Q. Did you, after Emmons and Tichenor passed away from that point, walk on up to where they stood? A. Emmons and Tichenor I never saw together at any time.

Q. Emmons, I mean, and Jordan? A. Did I walk up to that store?

Q. Up to the place where you say you saw this transaction occur? A. I walked by it several times afterwards; yes, sir.

Q. I mean then immediately afterwards? A. No, I do not think I did at that time; I do not remember of it; no, I am sure I did not.

Q. You did not undertake to measure the distance of it at that time? A. No.

Q. And then Jordan, after Emmons left him, walked across to the other side of the street, did he, where Tichenor was? A. Who? Jordan did?

Q. Yes, sir. A. Yes, sir.

Q. And then he and Tichenor walked up K street further? A. Yes, sir.

Q. About how far? A. Well, walked quite a little distance; I do not remember now. That is indistinct in my mind, whether I had talked to Tichenor after the Emmons affair or not, but I know it was not but a moment or two, if I did. I don't think I had time to, but I would not be positive about that now. It all happened so quick that I do not remember now exactly how that did occur. Whether I talked to Tichenor after he met Jordan, after crossing the street, I would not say now.

Q. Then Bunkers and he stood in front of a tea store, did they? A. No, American Cash Store, just around the corner on Eighth street—just around the corner a few feet.

Q. Where did you stand? A. Right near them, on the other side—that is, by the corner.

Q. I thought you said Jordan and Bunkers walked up K street towards Ninth after Jordan crossed the street? A. No, Jordan and Tichenor.

Q. Did not Jordan and Tichenor walk up towards Ninth street? A. Yes. Tichenor came back.

Q. Tichenor came back? A. Yes, sir.

Q. Where did Jordan go? A. Jordan was with Bunkers. They met.

Q. Did he meet Bunkers up where Tichenor and he went, or above there? A. Tichenor must have seen Bunkers coming, and they separated then, and Tichenor turned back.

Q. Tichenor turned and walked back towards Eighth street? A. Walked back toward Eighth street.

Q. And then turned and Bunkers walked back towards Eighth street? A. Yes, sir.

Q. And when they walked back to Eighth street, and got onto Eighth

street, which way did they go on Eighth street? A. By this Cash Store, right at the corner.

Q. Which is on Eighth street? A. On Eighth and K.

Q. Is it on the corner? A. Yes, sir.

Q. Where did you stand at that time? Had you crossed the street? A. Yes, I crossed the street. I was within 20 feet, I guess, of them—right behind them.

Q. Did they see you? A. I do not know as they did.

Q. You say that Bunkers was standing with his back to the street, on the sidewalk? A. Yes, sir.

Q. And Jordan was standing with his back towards the building? A. Not exactly that way—diagonally.

Q. And you stood on the corner of Eighth street? A. Right next to the building.

Q. Did they stand in Eighth street? A. In the street?

Q. No, not in the street, but I mean in the line; were they on Eighth street? A. Yes, sir, I should judge just above the corner.

Q. Were they on Eighth street or K? A. They were on Eighth street.

Q. Where were you? A. I was right at the corner of Eighth—at the corner of the building.

Q. At the corner of the building? A. Yes, sir.

MR. SIMPSON: Q. What building? A. The American Tea Company or the American Cash Store.

Q. How many feet were you from them at that time? A. About fifteen or twenty feet, I should judge, relatively.

MR. CATOR: Q. Did you stand in plain view of those people, if they looked at you? A. Yes, sir.

Q. And within fifteen or twenty feet of them, and if they looked at you, they would have seen you? A. Yes, sir.

Q. Was Jordan's back towards you? A. Yes, sir; his back was towards me.

Q. You had not seen this money delivered by Jordan and Tichenor, had you? A. No.

Q. And you have no knowledge of the shape in which the money was handed to Jordan? A. Only from what Tichenor told me.

Q. Only from what Tichenor said? A. That is all.

Q. How many bills were handed to Emmons that you saw? A. I could not tell how many from where I stood.

Q. How many were handed to Bunkers? A. I do not know.

Q. Were the bills handed to him right out open without being folded at all—full length? A. Yes, sir.

Q. They were not rolled up at all? A. No, sir.

Q. He took them out of his pocket, did he? A. Yes, sir.

Q. And just handed them out? A. He motioned that way and passed them to them; that is all there was to it.

Q. Then you judge these bills were loose that way in his pocket when he took them out? A. No; I think he fumbled with them a little and took them out—unrolled, or something of that kind. I know he handled them; took them out of his pocket and did something with them—I could not see that, and then I seen him hand the money.

Q. You did not see what he did? A. I know that I could see that they were bills that passed.

Q. How could you see that they were bills? A. Well, as near as a man could see anything.

Q. That is as near as you know? A. That is as near as I know.

Q. You had been instructed by Mr. Tichenor that he had this money in his pocket, had you? A. No, he had not told me where Jordan had this money.

Q. He had not told you that? A. No, sir.

Q. Nor anything about the shape of it? A. No.

Q. Nor the amounts that were to be paid? A. Yes, sir.

Q. He told you that? A. Yes, sir.

Q. But had not told you anything about the shape of it. Had he told you it was paper money? A. Yes, sir; I saw them.

Q. You saw them in Tichenor's hands before they were delivered to Jordan? A. Yes, sir.

Q. Did you ever see money delivered on any other occasion before that in that way? A. No.

Q. This is the first time that you were ever employed in this capacity as a detective to observe the passage of bills from one man to another? A. Yes, sir.

Q. How long have you lived in California? A. All my life.

Q. Born here? A. Yes, sir.

Q. Have you had much experience in seeing paper money in California? A. Well, as much as a man ordinarily would.

Q. How long before this had you seen any paper money of any consequence—any number of bills—paper money? A. I do not know; I cannot tell you that; I do not know how long.

Q. It is a fact, is it not, that almost all the transactions in money here are in gold coin or in silver? A. I prefer it.

Q. Is it not a fact that it is very seldom in your life you have seen paper money used? A. I have seen quite a number of bills used, yes—quite a number.

Q. It is very unusual? A. Well, yes; you do not see as many bills as you do money—in gold.

Q. You say you were born in California? A. Yes, sir.

Q. Where? A. Downieville, Sierra County.

Q. How long did you live there? A. I lived there until 1888.

Q. How old were you then? A. Well, I came here seventeen years ago.

Q. How old are you now? A. I am 49.

Q. Forty-nine? A. Yes, sir.

Q. You came to San Francisco seventeen years ago? A. 1888.

Q. You came from Downieville then? A. I did.

Q. Are Downieville and San Francisco the only two places in which you have resided? A. I have been to Alaska; I have been to Nevada City; Grass Valley; been to El Paso, Texas; been to Bakersfield—four years and seven months in Bakersfield. Do you want me to tell all my travels, and so forth?

Q. Well, Mr. Hartling, I intend to—— A. (Interrupting.) I intend to be respectful to you.

Q. I intend to put such inquiries as I deem proper? A. I was going to ask if I should relate to you——

Q. (Interrupting.) I was going to ask you what was your occupation before you came to San Francisco? A. I was mining for a while; that was my business; in that country everybody mines.

Q. When did you first do detective work? A. I was deputy sheriff and constable in Sierra County.

Q. How long? A. Four years.

Q. That was more than seventeen years ago. When did you do detective work aside from that? A. In San Francisco.

Q. In what capacity? Have you been employed in any regular detective office? A. Yes, sir.

Q. By whom? A. Harry Morse.

Q. How long were you with him? A. About six years.

Q. And during that time were you engaged steadily in detective work, so far as you were engaged at all? A. Yes, sir; I was four years and eight months on one case.

Q. What case was that? A. Bakersfield.

Q. Did you know Senator Emmons there? A. I did.

Q. What was the nature of the acquaintance between you and him—favorable and friendly, or unfriendly? A. Very friendly. I like the man very much.

Q. Was he Assistant District Attorney during any portion of that time? A. He was, and I liked him very much, and I like him yet.

Q. Did you work with Tichenor there? A. No, sir; never was with Tichenor, as I told you before, until the 23d day of January.

Q. What detective work did you do in Bakersfield, in a general way—were you employed on regular detective work while you were there? A. Yes, sir.

Q. All the time? A. Yes, sir.

Q. No other occupation? A. No, sir.

Q. How long have you been engaged in private detective work altogether? A. Since 1890.

Q. That would be fourteen years? A. I have been constantly engaged in the business since 1890.

Q. That has been your only occupation? A. My only occupation.

Q. Did you have anything to do at any time with doing detective work that related to Superior Judge Ham of Napa County? A. No, sir.

MR. RALSTON: Mr. Chairman, I fail to see where that is material in this matter here. A. Excuse me; I will tell you I had nothing to do with that matter.

MR. CATOR: Q. Were you not accused by Judge Ham of being engaged in an operation to blackmail him? A. No, sir; no, sir.

Q. What was there about that? A. I was accused by a man that I had with me of doing that—of trying to blackmail Ham; he wrote to Ham and told him. F. E. Johnson, who is an honorable man is my friend, and he accused Johnson of doing this—having me employed; and it was absolutely false in every respect. I defy you or any other man to say to the contrary.

Q. I am only asking you? A. I say I am telling you now.

Q. The accusation was made, was it? A. Yes, sir.

Q. By Judge Ham? A. No, sir; not to me.

Q. To others? A. I don't know; Johnson told me of it first.

Q. What did he say? A. He said that such was the story, and I says: "I do not know anything about it," and he asked me if he had spoken to me about the matter, and I said: "No, you never did."

Q. What did he say the story was? A. I do not remember exactly now—some story about Ham talking about him—some disagreement

that he and Johnson had, that this story was started to blackmail Ham from F. E. Johnson.

Q. Were you employed in any capacity in and about what was known in San Francisco as the "Little Pete" bribery scandal? A. No, sir.

Q. Were you employed in any way in what was known as the "Little Pete" jury bribery affair? A. In the murder case, yes.

Q. In what respect were you employed in that? A. I was employed as detective in the matter to run down and see who the witnesses were for the prosecution. I was employed by the defense.

Q. By the defendants? A. By the defendants.

Q. That is, "Little Pete"? A. No, sir.

Q. Who was the defendant? A. I forget the Chinaman's name now; I cannot recall it.

Q. "Little Pete" was the party that was supposed to be attending to these affairs, was he not— did he employ you? A. "Little Pete" was dead.

Q. Did "Little Pete" ever employ you? A. No, sir.

Q. Do you know the name of the Chinaman that did? A. No, sir; I do not remember it now.

Q. What was the nature of your employment in that matter. A. To hunt up certain witnesses that identified these Chinamen as the murderers of "Little Pete."

Q. Do you know Ex-Assemblyman Bert Schlesinger. A. Yes, sir.

Q. What was the nature of the difficulties that you and he had about detective work for litigation? A. Well, I was opposed to him in several cases; that is the only difficulty we ever had.

MR. McNAB: Same difficulty as between me and Mr. Cator? A. That is all. We will take a drink when we get through here.

MR. CATOR: Q. Has your compensation in this matter been fixed since you finished the work? A. In this matter?

Q. Yes, sir. A. No, sir.

Q. You do not know what you are to receive? A. No, sir; I have not presented my bill.

Q. The only understanding is that it is to be proportionate to the value of the services? A. I will judge that later on.

Q. You will be the judge of that, will you? A. Yes, sir.

Q. That is, you will get whatever you charge? A. I suppose I will charge a reasonable compensation.

Q. You expect to be the judge of it, don't you? A. Yes, sir.

Q. Do you expect to base it in any way upon the results obtained? A. No, sir.

Q. Why is it, then, that you said it would be determined by the nature of the matter? A. It all depends on how long I will be detained in this matter.

Q. But your compensation won't depend at all on the results? A. Not at all.

Q. Did not Schlesinger accuse you of testifying falsely—was not that the trouble? A. Oh, yes; yes, sir.

Q. What did he say about it? A. He said I did not tell the truth. Probably you will say that when I get through with this.

Q. Very likely. Is it not the nature of the employment that detectives are engaged in to do everything in their power to try and satisfy the parties that employ them that they have performed that service? A. Not necessarily; no, sir; not with me. I try to do my work satis-

factorily, and if the results are not as they expect, they have got to take my reports for it.

Q. When you and Tichenor talked over this business of his not being able to witness the payment of this money personally, or to pay it in person, was not there some conversation between you and him as to the difficulties presented by the situation? A. Yes, sir; he told me—he says: “It is impossible to get you into that house.”

Q. Did not the fact that it was considered extremely difficult to get evidence that would be satisfactory in this matter, without his making the payment in person, was not that what led to his telegraphing for further instructions? A. Yes, sir.

Q. Did you see him mark these bills, and put letters on them that he has spoken of in his testimony? A. I did not.

Q. But he showed you the letter? A. He did.

Q. That was not on all the bills? A. No, sir.

Q. On some of them? A. One of the seven.

Q. Did he state to you why he had done that? A. No, sir.

Q. Did he state to you where he had done it? A. No, sir.

Q. There was no conversation between you and him as to why he had done that? A. No, sir.

Q. Made no explanation to you of what end he expected that to subserve? A. No, sir.

Q. Did you yourself have any idea as to what end he expected to subserve by that? A. I had my ideas of it.

Q. Without asking him? A. Without asking him.

Q. What ideas did you have? A. I supposed that was for identification of some kind, that those bills might be recovered; that was the idea.

Q. But nothing was explained by him? A. Nothing at all.

Q. But he showed you the lettering? A. Yes, sir.

Q. But said nothing about the purpose? A. Nothing at all.

Q. Nor you to him? A. No.

Q. Has he ever talked with you since about any of those bills? A. No.

Q. Never been any conversation between you and him about that? A. No.

Q. Have you been employed in any capacity to see if you could find any of them? A. No, sir.

Q. Has there been any conversation about that since with you or to you? A. Oh, we have talked about the matter; I do not know about the bills exactly.

Q. Were there any other detectives employed in this matter, so far as you know, except you and Tichenor? A. Not to my knowledge.

Q. Has there been any others to your knowledge? A. Not to my knowledge. I do not know anything about anything except myself.

Q. Have you seen Jordan since that time? A. Yes, sir.

Q. When? A. I saw him last night.

Q. Any conversation between you and him? A. No, sir; never spoke to the man in my life, or he to me.

Q. You said you know him or did know him before that? A. No, sir.

Q. Did not? A. I did not know him until I saw him here.

Q. You only know him by his being pointed out to you after you arrived in Sacramento? A. No, sir; he was the man that went to 1116

while Tichenor was there, and I was told that was Jordan by Mr. Tichenor.

Q. That is all you know about Jordan? A. Yes, sir.

Q. You say that you had known Senator Bunkers before? A. Yes, sir.

Q. How long have you known him? A. Oh, I do not know; quite a number of years; seen him around the city—San Francisco.

Q. And you knew Senator Emmons in Bakersfield? A. Yes, sir.

Q. When Emmons was handed these bills, as you say, by Mr. Jordan, and you stood on the corner of Eighth street, you were looking then this way, as we call it—looking up the street.

MR. GOULD: East.

MR. CATOR: Q. Looking east, were you? A. When Emmons and Jordan came out of the saloon?

Q. No; when money, as you say, was paid to Emmons? A. Yes, sir; looking east.

Q. Where did Emmons stand in relation to the cigar store—near the store or near the street? A. Near the street.

Q. And Jordan stood nearer the store? A. Yes, sir; he stood a little nearer the store than Emmons.

Q. Where was Emmons standing with relation to the street with his back; was his back towards K street or his face towards it? A. No, his back was up the street. He was facing down.

Q. And Jordan stood facing Emmons? A. Yes, sir.

Q. Then Jordan stood with his back towards you? A. Yes, sir.

Q. And that, you say, was the situation when he paid Bunkers also? A. Yes, sir.

Q. On both occasions, as to Bunkers and Emmons, Jordan stood with his back towards you? A. Yes, sir.

Q. And stood facing the party he was paying the money to? A. Yes, sir.

Q. That is, he stood facing Bunkers? A. Yes, sir.

Q. And he also stood facing Emmons on these respective occasions? A. Yes, sir.

Q. That is, Emmons and Jordan, when the money was passed, stood face to face? A. Yes, sir.

Q. Is that right? A. Yes, sir.

Q. And Bunkers and Jordan stood face to face when the money was passed? Yes, sir.

Q. And on each occasion Jordan's back was towards you? A. Yes, sir.

MR. CATOR: That is all.

MR. GOULD: Q. How was it that you could see the money pass from Jordan to Emmons and from Jordan to Bunkers, if Jordan's back was to you and Emmons and Bunkers were facing Jordan? A. Well, Jordan's back was towards me, but I was standing on the corner. That kind of give me a slanting look towards them.

Q. Did you see the money pass? A. Yes, sir; saw the bills.

Q. In each instance? A. In each instance.

MR. JACOBS: Q. Did I understand you to say that you were employed by a Chinaman in San Francisco? A. Yes, sir.

Q. You do not recall that Chinaman's name? A. No, I cannot.

Q. Was it Wong? A. No.

Q. Or Wong Fong? A. Damn if I remember now.

Q. How long were you engaged? A. Three or four weeks.

Q. Did you ever testify in court in relation to that matter? A. No.
MR. JACOBS: That is all.

MR. ALEXANDER: Q. During the time that you were engaged on this did you see Senator Wright or Senator French at all? A. No, sir.

Q. Did not see them at any time? A. No.

Q. What did Tichenor state to you after he had been told by Jordan that the money had been paid in the absence of Tichenor and yourself? A. Tichenor told me—do you want me to say what Tichenor told me?

Q. Yes. A. Tichenor told me that Jordan told him that he made a mistake, and thought he was going to meet him on Tenth street, and he says: "By George, I have been looking around, and I could not find you;" and he says, "I gave them the money, all right; they have got the money."

Q. What was Tichenor's comment about the payment being made in the absence of both of you? A. He says—Tichenor said he told him: "Well, I guess it is all right; we will have to take your word for it."

Q. Did Jordan say that anybody witnessed the payment to either Wright or French? A. No; he never told me anything of the kind.

Q. Was Tichenor pleased with the method used by Jordan? A. Not very well.

Q. He did not like it. You say that Emmons and Jordan parted with a handshake? A. Yes, sir.

Q. Regarding this payment, how long did it take in the case of Emmons? A. Not very much.

Q. A short time? A. A very short time.

Q. Very short? A. Yes, sir.

Q. There was no fumbling in front of him as in the case of Bunkers? A. Well, there was—run his hand in his pocket, and I could not see what the motion was with his hands.

Q. When this fumble was in front of him—

A. (Interrupting.) I could not see his hands in front of him. I saw the bills when he passed them to him.

Q. How close were they when they were standing together—Emmons and Jordan? A. Close together.

Q. Not over a foot? A. Not over a foot.

Q. How close were Bunkers and Jordan together? A. I don't know.

Q. Not over a foot? A. Well, I do not think they were.

Q. Not over a foot? A. May have been a little more—may have been.

Q. And the money was passed out by Jordan then? A. Yes, sir.

Q. You say in a loose condition? A. Well, so it looked to me—the whole transaction; it looked to me as if Jordan was doing that to show some one he was doing the thing—doing the trick.

Q. I asked you as to the condition of the bills; were they loose? A. They were open—yes, out.

Q. Elastic around them? A. Well, I do not know whether they were or not. I was not close enough to see them.

Q. They were at least in a flat-folded condition; they were not jumbled up? A. No, there were seven of them.

Q. Seven bills? A. That were showed me to be given. I do not know whether there was seven or one that was given. I know there was one; I do not know that there was seven or not.

MR. CATOR: Q. What hand did Emmons take them with—his right or his left hand? A. I do not know what hand he did take them with.

Q. What hand did Bunkers take them with—right or left?

MR. McNAB: Might of taken them with both hands.

THE WITNESS: He was standing this way—let me see; he was standing on the edge of the sidewalk that way; I think it was his right hand, and he held his coat open, and put it in his inside pocket. [Illustrating.]

MR. CATOR: Q. You think it was his right hand? A. Yes, sir; because he had his left hand up like that.

Q. And they were not more than a foot apart? A. Who?

Q. Bunkers and Jordan? A. I do not know, I say, how far apart.

MR. CATOR: That is all.

MR. RALSTON: Q. One question: Did you notice, or could you see the color of the bill, whether it looked like a gold note or an ordinary greenback? A. I could not tell.

Q. The color—— A. (Interrupting.) I know it was paper money—greenback.

MR. ALEXANDER: Q. Was the shade green or yellow? A. I could not tell that.

MR. JACOBS: Q. Could you distinguish any color? A. I know it was a greenback—what we call a bill.

MR. CATOR: Q. Did you know that from seeing it then—because you could tell then? A. I saw it then.

Q. Is there not a difference between the color of a gold note and greenback? A. Yes, sir; there is a little difference.

Q. Were these all greenbacks that you saw handed, or gold notes? A. They were all kinds—different kinds.

Q. You know that from what you saw before? A. Yes, sir.

Q. Will you swear that you saw with your eyes, and could tell from where you stood that some were one color and some another? A. No, sir.

Q. You do not swear to that? A. No, sir.

Q. Then the utmost that you swore to was that they were paper? A. Yes, sir.

Q. And looked like bills? A. Yes, sir.

Q. That is the utmost of your testimony? A. That is the utmost of my testimony; that is all I can say.

MR. GOULD: Q. You mean to say they were paper money? A. They were paper money.

MR. McNAB: Q. They were bills? A. They were bills; yes, sir.

MR. RALSTON: I move we take a recess until 8 o'clock. (Motion carried, and a recess taken until 8 P. M.)

FOURTH SESSION.

WEDNESDAY, February 1, 1905, 8 P. M.

THE CHAIRMAN: Are you ready to proceed?

MR. RALSTON: Yes, sir; ready to proceed—just a minute, Mr. Chairman.

THE CHAIRMAN: Senator Ralston.

MR. RALSTON: In questioning Mr. McNab to-day in regard to the affidavit of William Corbin, in regard to the first clause of the affidavit, I asked him the question as to what was the intent, and I would like to ask the privilege of Mr. McNab stating to the committee this evening—repeating what he said to the committee, and his idea in regard thereto.

THE CHAIRMAN: Mr. McNab, take the seat.

MR. McNAB: Well, Senators, I would say that in the construction of that affidavit, it was not for a moment the thought to convey, by the slightest implication, any suggestion that Mr. Anderson, the President of the Senate, had been in any way influenced in the appointment of that committee. We all recognized in the discussion of that that he was a man of the highest honor and integrity, and he had our unqualified respect and confidence; and if any such suggestion has gone forth, it was not my intention, and to avoid any such—the continuation of any such suggestion—I would withdraw that part of the affidavit, with the leave of this committee. Mr. Corbin, the maker of the affidavit, feeling as we do, and having the same intention, wishes that to be done.

THE CHAIRMAN: Well, Mr. McNab, I do not think that this committee has any power to grant that. But this committee, upon your request, may ask of the Senate permission to withdraw that part of the affidavit. Because the affidavit is now on file with the Senate, and is not the property of this committee, but belongs to the Senate, and they, of course, are the proper ones from whom leave must be asked to strike out or withdraw any portions of the affidavit, which is now on file with the Senate. And if you desire that this committee shall request of the Senate a striking out or withdrawal of a certain portion of the affidavit which is now on file with the Senate, if you should file with this committee your desires in the matter—what you wish to have, or have Mr. Corbin file with this committee what he desires to have stricken out of the affidavit—why the committee will present your request to the Senate.

MR. McNAB: Well, I would suggest, on that statement, that no such construction is intended; but to forbid the continuing of any such, I would request this committee to request the Senate to permit that portion to be eliminated.

THE CHAIRMAN: Well, I would prefer, Mr. McNab, if you would submit in writing to this committee what you desire to have stricken out.

MR. McNAB: Very well.

MR. CATOR: Mr. Chairman, I think that the defense have some rights in the matter that they may desire to argue the effect of later, and that

we have some rights in that respect. I think it is not even within the power of the Senate to expunge the statements of those not in the presence of the Senate. The Senate may expunge anything in its own records that is received by way of the remarks of a Senator, but not affidavits sworn to and placed on file by a person who is not a member of the Senate; that cannot be expunged. If Mr. Corbin desires to make an additional affidavit explanatory of this one, I think, perhaps, it would be the duty of the committee to receive it.

MR. McNAB: He does not wish to do anything of the sort, Mr. Cator—I will tell you so at this time.

THE CHAIRMAN: I think that that would be within the option of the Senate in determining this objection.

MR. CATOR: I have no objection to its determining the objection when it goes before the Senate. Is that the idea?

THE CHAIRMAN: Yes, sir.

MR. CATOR: I will state at the present time that it may be to our interest to have it remain as it is; and in order to save that point, I do not wish it to appear that it won't without objection.

MR. McNAB: Senators, we have two witnesses to simply a formal part of this transaction that we would like to put on now, that they may return to San Francisco.

THE CHAIRMAN: Put on your witness.

MR. McNAB: Mr. Heins.

MR. CATOR: I would like to ask one question; has Mr. Hartling gone home?

MR. McNAB: I do not think he has gone home.

(The witness spoken of was not present, and Mr. Moses Heins took the witness stand.)

TESTIMONY OF MOSES HEINS.

Sworn.

MR. GOULD: Take this chair, Mr. Heins.

MR. McNAB: Mr. Heins, where do you live? A. I live at 238 Kearny street, San Francisco.

THE CHAIRMAN: Speak up, Mr. Heins, as distinctly as you can.

MR. McNAB: What is your occupation? A. Deputy Assessor, in the Assessor's office.

Q. I will ask you if on Monday—a week ago last Monday, in the afternoon, in the rotunda of the Mills Building, I indicated—I requested you to receive certain packages from a gentleman that I would indicate to you standing in the rotunda? A. Yes, sir.

Q. What did you do with those packages? A. I immediately brought them up to Fremont Older, at the Bulletin office.

Q. I will ask you if I later requested you to go to the Bulletin office and get certain packages from Mr. Older? A. Yes, sir; when I received those packages, immediately you informed me that you would designate a certain party that would be in waiting for me, and that he would give me the secret of the business by taking off his hat—that I was to pass the papers to the gentleman taking off the hat.

Q. Where was that? A. In the rotunda of the Mills Building.

Q. Did you do so? A. Yes, sir.

Q. I will ask you if on Tuesday you also received under similar circumstances another package from a gentleman in the Mills Building?
A. Yes, sir.

Q. Did you take that to Mr. Older? A. Yes, sir.

Q. Did you later go to Mr. Older and receive a package from him?
A. I received a package at the time; yes, sir.

Q. And delivered it to another man under similar circumstances?
A. Yes, sir.

MR. McNAB: That is all.

MR. CATOR: That is all, Mr. Heins.

THE CHAIRMAN: Does any member of the committee desire to ask Mr. Heins any questions?

MR. SIMPSON: Q. Do you know who the man was that you delivered these packages to? A. No, sir; I do not.

Q. Would you know him, if you saw him? A. I might, possibly; I hardly think I would.

Q. Do you know whether he is here now? A. I haven't seen him; if he was here, I might probably know him. The gentleman that took his hat off, I would know.

MR. CATOR: I do not suppose there is any dispute about that matter.

MR. SIMPSON: Sir?

MR. CATOR: I say I do not suppose there is any dispute about that matter.

MR. McNAB: Mr. William Russell.

TESTIMONY OF WILLIAM RUSSELL.

Sworn.

MR. McNAB: Q. Mr. Russell, where do you live? A. In San Francisco.

Q. What is your first name? A. William.

THE CHAIRMAN: Speak a little louder, please, in order that we may understand.

A. William N.

Q. What is your occupation? A. I am an employé of the Continental Building and Loan Association.

THE CHAIRMAN: Speak up as well as you can, Mr. Russell, please, so that we can hear.

MR. McNAB: Q. Mr. Russell, did you, on a week ago yesterday, receive instructions from Mr. Corbin to appear at the rotunda of the Mills building, and there receive a package from somebody who would give it to you? A. I did.

Q. Did you receive such a package? A. I did.

Q. What did you do with that package? A. I took it to the office, and Mr. Corbin told me to take the 7 o'clock train and bring the package to Sacramento and Mr. Tichenor would meet me at the depot, and I was to deliver the package to him.

Q. Did you do so? A. I did.

MR. McNAB: That is all.

MR. CATOR: That is all.

THE CHAIRMAN: One moment. Any member of the committee who desires to ask Mr. Russell a question?

MR. CATOR: Oh, one moment. What day was that?

MR. McNAB: That was Tuesday, a week ago yesterday.

MR. CATOR: Q. You came in on that evening train? A. Yes, sir.

MR. McNAB: Mr. Corbin, please.

TESTIMONY OF WILLIAM CORBIN.

Recalled.

MR. McNAB: Q. Mr. Corbin, where do you live?—oh, you have not been sworn yet.

THE CHAIRMAN: Yes, he was sworn the first night.

MR. McNAB: All right. Q. Where do you live, Mr. Corbin? A. In San Francisco.

Q. You have filed an affidavit in this hearing before the Senate of the State of California, have you not? A. Yes, sir.

Q. Will you state to this committee of the honorable Senators your knowledge and information regarding matters contained in that affidavit? A. On Friday afternoon, a week ago, a gentleman called at my office and said that he had noticed the persecution of our association by the San Francisco "Examiner." He said that the Committee on Retrenchments and Commissions, I believe it was——

THE CHAIRMAN: Let us have quiet here, please.

A. (Continuing) had been arranged so by Al. Murphy of the San Francisco "Examiner;" that they proposed to make a very bad showing for us, if they could; that Bunkers had been elected by money furnished by the "Examiner," and that Senator Emmons had been employed by the "Examiner."

THE CHAIRMAN: Q. Who was the gentleman that called at your office? A. I do not know him.

MR. McNAB: Q. What statements did he make to you as to his personality? A. The gentleman?

Q. Yes, sir. A. He simply stated to me—he said: "I am a stranger to you, but I want to see fair play. I am a stranger to you, and I intend to remain so." After I received this, I went immediately to Mr. McNab's office and told him what I had heard. He said he was not surprised at it. I said no more about it until I received a telephone message from Mr. McNab—I think on Sunday night—and I think I went to Mr. McNab's—yes, went to Mr. McNab's office. He says: "The person who told you has evidently told you the truth, because I have information that Senator Bunkers"—Bunkers and French and a man by the name of Jordan, I think it was he said—were in San Francisco at the time drumming up business in the way of gathering funds from corporations that wanted to be left out of any investigation.

MR. CATOR: Q. Who do you say was saying all this—Mr. McNab? A. Mr. McNab.

MR. CATOR: Oh, yes.

THE WITNESS: He said that—now, I don't know whether it was that night or next day; I had another conversation with him the following day—but in one of them he said that these people had agreed to leave out the Phoenix and the Renters' from an investigation, from what he could understand, on the payment of a certain amount of money. He asked me if I knew where Mr. Tichenor was. I says "yes." When I

first heard of this trouble, I immediately telegraphed for Mr. Tichenor to come home—I might need him, and I thought he would be home that afternoon. He came home, and in the meantime we had made arrangements by which Mr. Tichenor was to come to Sacramento, I think, on the 7 o'clock train Monday or Tuesday night—I do not know which it was—and was to go under the name of William Newell and was to call on a man by the name—I think he went by the name of Frank Jordan at that time—at 1116 Seventh street, and to have Mr. Tichenor call at the rotunda in the Mills Building. I had Mr. Tichenor call there, and when he came back he was—he said he had some packages, and I told him to take those and go to Sacramento, and to employ some one to go with him.

MR. McNAB: Q. What did you tell him to do when he went to Sacramento? A. I told him that I had been informed by Mr. McNab that a combination had been made by which four Senators, which controlled a majority of the Board of Commissions and Retrenchments, had formed themselves—had made this combination to hold up institutions and blackmail them, and that this man Jordan was to be the go-between. I says: “Mr. McNab and I are very anxious, if anything of this kind is going on, to have these fellows trapped, and I want you to go to Sacramento and see if this is true, and if it is true, I want you to have your witness with you and pay the money to them yourself, so that there can be no question of what—if they get it.” He left San Francisco; on the following day I received a telephone from him—telephone message from him—stating that Jordan wanted some money; that he said the contract price when he was in San Francisco to deliver these—deliver these four Senators—was two hundred and fifty dollars, and not a hundred and fifty; so I told him to call me up again in about twenty minutes, and in the meantime I telephoned to Mr. McNab, and Mr. McNab asked me whom we would send up with the hundred dollars. I told him I could send Mr. Russell. So I sent Mr.—he told me to send Mr. Russell up to the Mills Building, the same as I had Mr. Tichenor. I did so, and when Mr. Russell came back he said he had a package that some one gave him there, and I told him to take that and come to Sacramento and meet Mr. Russell in the depot—in the S. P. depot. He took the train and I understand met him and delivered the package. Then, I think, it was the following—it may have been the same day: that I do not just recall, but Mr. Tichenor called up and stated that he had great difficulty in delivering the money to the Senators personally: that they were all willing to accept except Senator Emmons, who said that he would not go into the proposition where there was so many involved; that he was afraid of an exposure, but that he would accept the entire amount and take on himself the responsibility of delivering his part—each his part. I told him I knew Senator Emmons too well to trust him in a matter of that kind, and not to do it. I asked him if he could deliver the money in any way and see it delivered; he said he thought he could. “Well,” I said, “we will leave the matter entirely in your hands; all we want is the matter arranged so that we can prove the case in any court of justice or wherever it would be necessary.” I think that is the last conversation I had from Mr. Tichenor until he arrived in San Francisco, possibly on the following Wednesday.

MR. McNAB: Q. I will ask you if, when I communicated to you the

proceedings of the Senate in San Francisco, if I did not state to you that the proposition advanced was that the Senators—four Senators—would favor the Continental Building and Loan Association for the sum of ten thousand dollars, and the agent to receive two thousand? A. You did; I was also told the same thing by the gentleman that came in my office.

MR. McNAB: That is all.

Cross-Examination.

MR. CATOR: Have you that affidavit, Mr. Chairman, or a copy of it?

MR. CHAIRMAN: We have; yes, sir.

[A copy of the affidavit of Mr. Corbin was here handed to Mr. Cator.]

MR. CATOR: Now, Mr. Chairman, I am placed in a very peculiar position. I have an associate in this case who came into the case on the evening before I was retained by the Senators myself, and who is unable to be here to-night, and he has requested me, with great fervency, to ask that the cross-examination of Mr. Corbin and Mr. Tichenor be postponed until he can be here. I, of course, desire with all the urgency I can use as counsel, to press the matter, and hope that the request may be granted.

MR. McNAB: I will say, if the Senators please, in that connection, on behalf of Mr. Corbin, that he is a very, very sick man; that he needs the services of his physician in San Francisco, and it would almost be impossible for him to remain here longer than this evening, without going to San Francisco; and it would be unmerciful to have this cross-examination prolonged in his present physical condition. If a recess were to be taken, it would certainly require to be of sufficient length of time for him to go to San Francisco and rest a day in the care of his physician before returning. I simply make that statement as a statement of fact. He is prepared to go on and get through tonight, if it takes all night.

THE CHAIRMAN: It seems to me we should go on.

MR. CATOR: One moment, if the Chairman please. I desire to say that my associate gave me, as a reason for this, that he had sent for and expected data for these cross-examinations which we have not possession of. It is a matter with the committee.

THE CHAIRMAN: It seems to the committee—I think we are unanimous in it—that there are three attorneys here representing the Senators, and that it is absolutely necessary that we must proceed with this investigation in order that we may get through with it. We do not want to do anything that will be against the Senators, of course, or against anybody; but I presume that if it is absolutely necessary for Mr. Copeland to cross-examine Mr. Corbin at some later day—if he thinks that is essential—why the committee might consider having Mr. Corbin return here at some later date. But I think that we had better proceed now with this cross-examination.

MR. CATOR: If I must, notwithstanding presenting his request, proceed, I would like to ask if it is not understood here that we have abrogated the technical rules of law, that the mere fact that we are not in the possession of data by which we may cross-examine the witness, or ask him the specific questions that would enable us to contradict him—I assume the committee will not hold us to the strict rule, but that we may

producesuch evidence, notwithstanding the technical rules of law. What?

THE CHAIRMAN: I think that your experience with the committee, Mr. Cator, has been that it has been pretty liberal.

MR. CATOR: Yes, sir; I have no fault to find.

MR. SIMPSON: Cannot you go ahead? The committee has given you a wide range of cross-examination to-day.

MR. CATOR: I only observed that Senator Simpson was of opinion this evening that the range was too wide, where you are without the data, and you must go ahead. I had no knowledge of this matter until now, so that I am not in a position to lay what is called the foundation for a contradiction by other witnesses; but I shall assume that the strict rules of law will not prevail here in these matters.

MR. SIMPSON: Well, the best way, Mr. Cator, will be to meet our difficulties as we reach them, and perhaps we would be able to surmount them.

MR. CATOR: That is true. I might add that that is the only reason I do it—to save time.

Q. Mr. Corbin, how long have you been connected with this Continental Building and Loan Association? A. Twelve or fifteen years.

Q. And you are the person who made this affidavit which has been referred to, verified on the 27th day of January, 1905, at the bar of the Senate, are you. A. Yes, sir.

Q. You read that affidavit as signed by you? A. It was drawn up in Mr. McNab's office in my presence, also that of Mr. McNab and Mr. Nicol.

Q. Did you read it before you swore to it? A. I did.

Q. And were familiar with its contents? A. Yes, sir.

THE CHAIRMAN: Let us have quiet a while.

MR. CATOR: Q. You say that the gentleman whom you refer to as calling upon you and stating to you that the "Examiner" had put up this committee for this purpose—you do not know what his name was? A. No, sir.

Q. Did you ask him what his name was? A. I did.

Q. What did he say? A. He said he would not care to have me know who he was at the present time.

Q. Had you ever seen him before? A. I had not.

Q. Have you ever seen him since? A. No, sir.

Q. Have you ever attempted to find out who he was? A. No, sir.

Q. Was it Jordan? A. No, no; it was not Jordan; I have seen him since.

Q. You have seen Mr. Jordan since? A. Yes, sir.

Q. It was not he? A. No, sir.

Q. This gentleman did not approach you with a demand for money? A. Not at all.

Q. He approached you, as I understand, more in the nature of a friend in this matter? A. Apparently so.

Q. That is, he wanted to put you on your guard? A. Yes, sir.

Q. Well, was not it a little late for him to do that, in that respect? A. Well, I do not know about that.

Q. Had not you already practically taken the ground that the "Examiner" was doing all it could to injure you? A. Well, you mean in that committee?

Q. Yes, sir. A. Well, we had heard rumors of that, but nothing definite until that gentleman came in; of course we had the rumors of it all the time.

Q. Then you have made no effort since to ascertain who he was?
A. I have no way of finding out.

Q. He just came in and said this and went away? A. Yes, sir.

Q. And you have made no effort to find out who he was? A. I had no way of making an effort.

Q. Have not considered it very desirable, have you, to find out?

A. I don't care at the present time; no.

Q. Cannot you give a description of him a little more particularly?

A. Yes, sir; he is a man about your size and your age.

Q. May be I am the man. A. It was not you.

Q. Oh, it was not?

MR. McNAB: No chance for mistaken identity there.

MR. CATOR: Q. Well, any further description that you can give that—had he any other characteristics or habits that I have not got, that you are aware of? A. I do not know your habits, Mr. Cator.

Q. You said that he was about my size and age. Now, were there any other differences? A. He had brown eyes—I do not know what the color of yours are.

Q. Yes, sir. A. And he had a smooth face; he had no mustache.

Q. No mustache? A. No, sir.

Q. And that is about all the description you could give of him, is it?
A. Yes, sir.

Q. How was he dressed? A. He had a dark suit on.

Q. Well-dressed man? A. Yes, sir; quite well.

Q. Did you tell Mr. McNab that he did not give his name, and so forth? A. I did.

Q. Did Mr. McNab seem to know anything about who the man was?
A. No, he simply said: "I am not surprised at the information you bring me."

Q. Have you any knowledge whether Mr. McNab sent him there or not? A. None whatever.

Q. Did you ever ask Mr. McNab who sent him there? A. No.

Q. Ask him if he knew the man? A. No.

Q. Did he express any surprise as to who the man was? A. No; he did not appear to be surprised at all; he said he was not surprised.

MR. CATOR: No, he was not; and I think very likely that is so.

MR. McNAB: I suppose the editorial remarks of Mr. Cator do not go into the witness' answer.

MR. CATOR: No; they are simply laid on the shelf with yours.

MR. GOULD: Well, I hope they will both be quiet there.

MR. CATOR: Now, you say in this affidavit to which you have sworn: "This affiant had been informed and believed that the creation and institution of said committee had been at the suggestion of the San Francisco 'Examiner,' and that the suggestion had for its purpose the prosecution of Dr. Washington Dodge, Assessor of the City and County of San Francisco, President of the Continental Building and Loan Association, who had given political offense to the 'Examiner,' and the prosecution of this affiant." Now—

MR. GOULD: "Prosecution?"—is that word "prosecute?"

MR. CATOR: "Persecution"—"persecution of this affiant."

Q. Now, why did you say that it had for its purpose the prosecution of Dr. Washington Dodge?

MR. GOULD: Does it say "prosecution?"

MR. CATOR: Yes, sir; it is "p-r-o-s" here, if it is copied correctly, as to Dodge—the prosecution of Dodge and the persecution of Corbin.

Q. Why did you mention this matter about the prosecution of Dr. Dodge in your affidavit? A. I would have to go back a little ways before this time to answer that.

Q. Well, go on; we want to know why you made this affidavit that you did.

MR. McNAB: Well, that is in evidence already; that is in evidence already.

MR. CATOR: Yes, sir, it is; and if you are not afraid of anything, you will not be afraid to have him state why he said that.

MR. McNAB: No; I am not afraid of the "Examiner" prosecuting me.

MR. CATOR: No, no—

MR. McNAB: Not a bit, Mr. Cator—even with you as attorney.

MR. CATOR: No, no; it is not said that they will do so.

Q. Why did you insert that matter in this affidavit here before this Senate? A. Because it was a fact, I believed.

Q. Well, was it a fact that had anything to do with the action of these Senators? A. Yes, sir; without any doubt, I think.

Q. Well, in what way? A. Well, as I stated, in order to get the foundation for this I would have to go back.

Q. Well, go back and go on; that is the shortest way. A. Last fall there were several articles appeared in the San Francisco "Examiner" giving its columns to matter derogatory to the Association about some simple foreclosure—the man was not paying on his loan, and we foreclosed, and we were foreclosing the mortgages—and the "Examiner" would give us a column or two on it, and wind up by saying: "This is the institution that Dr. Washington Dodge and Gavin McNab—Dr. Washington Dodge is president and Gavin McNab is attorney of." Why they put that in, of course, it is not necessary to argue the matter at all. Now, that continued for some time, and it is still continuing. I could not understand why, if there was no connection between the persecution of the "Examiner" and this committee, why certain data that they were furnishing the committee at the time should be furnished by them. And if they did not intend to persecute Dr. Dodge, they would not wind up the article as they did; that was my deduction from the whole thing.

Q. Now, then, that is as to Dodge. Now, then, you say about a persecution of yourself. How were you being persecuted? A. Well, I think that is apparent without any argument at all, or any answer.

Q. Well, I do not see how it is apparent. You say you were being persecuted as an individual; by whom—by the "Examiner"? A. By the "Examiner;" the very articles that they were writing last fall.

Q. That is what I want to know. A. The very articles they were writing last fall were done from pure cussedness.

Q. Now, is it not a fact that what you call the persecution of the "Examiner" as to you, and what you call the persecution of Dr. Dodge—

THE CHAIRMAN: I would say, Mr. Cator, in the Journal it appears "Prosecution of Doctor Dodge"—so that is evidently a misprint. In the Journal as it appears in the Senate it is "prosecution."

MR. CATOR: Will you just strike out that question? It has been interrupted so that I have forgotten the question.

Q. Is it not a fact, Mr. Corbin, that because of this controversy that

had been going on in the "Examiner," which you here denominate a persecution of you and a prosecution of Dr. Dodge, and a constant winding up with the reflections, as you say, upon Mr. McNab and other ones, all affecting the Continental Loan Association, that you conceived that the most effective method, or practically the only one you had, of trying to strike at the "Examiner" was by getting up a scheme by which you could make a charge of corruption against these four Senators, and in the same connection charge that the "Examiner" had been responsible for the efforts of these Senators to blackmail you, as you should call it? A. We did not get up a scheme; the "Examiner" and that crowd got it up.

Q. No; but I am speaking of the scheme of furnishing this money to these men to come to Sacramento. At the time that that was furnished, you contemplated, did you not, an explosion as the result? A. I was not contemplating any explosion at all.

Q. Did not you contemplate that, as soon as your agents had reported to you, they could furnish evidence of the kind that you required; that you would make an affidavit of this kind and a charge of this kind?

A. Well, the affidavit was not considered at the time we were doing—we started on this work. We did it for the simple purpose, if the "Examiner" was interested in it—of course we wanted to know it, and if these people were to be corrupted, and were the kind that could be corrupted, we wanted to know it. We did not want to appear before such people.

Q. Well, did not you consider that if you could procure evidence that this money was taken by this committee, that it would be a most effective method for you and your Association, and you and Dr. Dodge and Mr. McNab to try to strike at the "Examiner?"

MR. McNAB: Well, wait; I would just like to make a suggestion. There is no Senator named Senator Robert or Senator "Examiner" accused of taking any money, is there? I wanted to have the record straight in that particular.

MR. CATOR: You have accused Senator Emmons, Senator Bunkers, and Senators Welch and Wright of taking money.

MR. McNAB: Oh, no; not Welch—excuse me.

MR. CATOR: I mean Senator French, Senator Emmons and Senator Bunkers have been charged with taking this money.

MR. McNAB: Yes, sir: that is what I thought

MR. CATOR: You have interrupted my question now, Mr. McNab, so that the witness, of course, does not know how to answer it. I like to be very lenient to counsel, but I think you ought not to have interposed that interruption; it served no purpose. What is the question?

(The Reporter read the question, as follows: Q. Well, did not you consider that if you could procure evidence that this money was taken by this committee, that it would be a most effective method for you and your Association, and you and Dr. Dodge and Mr. McNab to try to strike at the "Examiner?")

MR. CATOR: Strike the words "this committee" out; I mean the State Senators, instead of this committee—say "the accused Senators;" then read the question as it will read that way.

(The Reporter thereupon read the question as amended, as follows: Q. Well, did you not consider that if you could procure evidence that this money was taken by the accused Senators, that it would be a most

effective method for you and your Association, and you and Dr. Dodge and Mr. McNab to try to strike at the "Examiner?") A. Our main purpose in the whole—

Q. (Interrupting.) Well, will you answer it, yes or no, in the first place? You will have an opportunity to make what explanations you want to. A. Well, I do not want to answer that, yes or no.

Q. What? A. I do not want to answer questions that would mislead simply yes or no. I will try. It is not always possible to furnish the—

Q. (Interrupting.) Well, go on and answer it in your own way. A. Yes, sir. I might say no; but our main purpose in the matter was to prevent this class of persons in the Senate, if there were such people here; if the "Examiner" was mixed up in it, why we naturally would find it out, of course, and I don't know but what it would have been right that we should if they were mixed up in it.

Q. Well, was not it, as a matter of fact, now, a part of the purpose you had in mind, to try to strike at the force of the "Examiner's" cause or course, that way? A. If they were mixed up in it—yes, sir.

Q. If they were mixed up in it. And you charged that they were mixed up in it for that purpose, did you not? A. To the best of my knowledge and belief, on information and belief, I did charge it; yes, sir.

Q. And that charge was inserted for the purpose of effecting the act or purpose that I have spoken of, was it not? A. Why, most assuredly; it would not have been put in there otherwise.

Q. Now you say—was there anything in your conduct that you feared to submit to the examination of any Senate committee? A. Not if they were honest. I would not submit to any committee of examination if I thought they were dishonest, if I could help it.

Q. Well, did you have any personal acquaintance with any of the Senators? A. Yes, sir.

Q. With whom? A. I was personally acquainted with Mr. Bauer.

Q. Mr. Who? A. Bauer of San Francisco.

Q. Bunkers, you mean? A. No, sir, I do not mean Bunkers; I do not know Bunkers, and I do not want to.

Q. No, but I mean were you personally acquainted with any of the Senators on the Committee on Commissions and Retrenchment? A. Yes, sir; I was personally acquainted with Mr. Bauer.

Q. Bauer? He is not on that committee.

THE CHAIRMAN: Yes, he is.

MR. CATOR: Oh, he is—yes, sir; I beg your pardon. He is on the committee, but not on this charge? A. That is the only one I personally know.

Q. Then how did you know that any—or that the committee was dishonest beforehand? A. Because it was so reported.

Q. Well, is not it? A. It was common talk in the city—I do not mean the committee, I mean those four Senators. Mr. Bauer is an estimable gentleman; I have nothing to say against him at all—a perfect gentleman.

Q. Did you think it—did you think that if you submitted to an examination by that committee, that if you could show that your company was in all respects what it ought to be, that there was any danger that there would be any report that would injure your company? A. I believed that if the twenty-dollar gold pieces were piled up to this ceiling, with that committee as it was, that there would be a report that

there was not a dollar in the treasury; that was my belief as to that committee as it was packed.

Q. Are you quite in earnest in that statement? A. Absolutely.

Q. You meant to say just what you said, did you? A. Yes, sir.

Q. That you believed that if you would pile twenty-dollar gold pieces in your treasury up to this ceiling, that that committee would report it was bankrupt? A. Yes, sir.

MR. McNAB: It may have been true after the visit of the committee.

MR. CATOR: Do you include the other three Senators?

MR. McNAB: No, sir; they are honorable men.

MR. CATOR: That statement that you have just made—I wish you would not interrupt me, Mr. McNab. I have not interrupted your examination in the past.

MR. McNAB: I apologize, Mr. Cator; I shall not interrupt you again.

MR. CATOR: You are appearing both as witness and counsel, with power to make all the reflections you desire upon these Senators, and your testimony, unsolicited, is only cumulative. I do not wish to be interrupted unless there is some cause for the interruption.

MR. McNAB: Your objection is sustained by this objector.

MR. CATOR: Q. Is that statement that you have just made as truthful as all the statements that you have made in this matter? A. Absolutely.

Q. That you believed that that committee, if your company could show that you had twenty-dollar pieces piled as high as this ceiling, would report to this Senate that you were bankrupt? A. I did not say bankrupt, did I?

Q. Well, some equivalent words.

MR. GOULD: That you had nothing in the treasury, you said.

MR. CATOR: That you had nothing in the treasury, you said—that would be pretty near bankruptcy. A. All right, then; if I said that, I will still.

Q. You believed that that committee would do that? A. Yes, sir.

MR. McNAB: Q. A majority of them, you mean, when you say that? A. I mean those four that we refer to here; I have no reflection—

MR. CATOR (interrupting): Q. Did anybody ever tell you—

MR. GOULD (interrupting): Q. Just a moment, please. What were you going to say? A. I do not wish to reflect upon the honesty or the honor of the other three of that committee.

MR. CATOR: Q. You say you had no personal acquaintance with these four of whom you are speaking? A. Only hearsay.

Q. Only hearsay. Well, did you ever apply to anybody else any such rule as that on hearsay? A. No.

Q. Then this is the only case in which you ever used any such judgment by hearsay? A. I do not think that you want to apply the word hearsay exactly to that proposition; as I told you, the "Examiner" had been several months before hammering at us, and every little lawsuit we had, foreclosing a mortgage or anything of that kind, and that Senator Bunkers had been elected with money furnished by the "Examiner."

Q. Did he— A. Knowing that as clearly as I did know it, and not having the lawful proof, and being told what I was told by the gentleman, and the rumors that were going around, that they were out for boodle—that was the common talk in San Francisco, that these four Senators had combined for boodle—common talk on the street, now, and that the "Examiner" had control of them, especially of Bunkers and Emmons;

now, with all that circumstantial evidence coming in, with what the "Examiner" had done, I knew that there would be—that they would be liable to do these things, and I was not taking any chances on the "Examiner."

Q. Then you believed for these causes that if you submitted to an investigation, and showed that you had every dollar on earth that you ought to have, that they would report to this Senate that you did not have a dollar in the treasury? A. Absolutely.

Q. You believed that? A. Yes, sir.

Q. And you do believe it still, do you not? A. I do.

Q. And that is the frame of mind in which you entered upon the course that you have, was it not? A. I wanted to prove my belief.

Q. You were in that frame of mind when you, with Mr. McNab, agreed to this course which you have pursued here, of giving this money to these men to be brought up here?

MR. McNAB: He did not state that he gave money to the men to be brought here; he stated, in fact, that he never gave a cent.

MR. CATOR: Q. Well, were you in that frame of mind when you arranged with Mr. McNab that money should be given to a man to be brought here? A. Yes, sir.

Q. And it was in that spirit and feeling that you acted, was it not? A. Most naturally—most natural feeling.

Q. Did you care whether or not that money ever actually reached these Senators, if you would be able to accomplish your purpose of getting them a bad name, when you entertained such views as that? A. I don't think that is a fair question. The money was paid for the purpose of testing those men; it was put there for that purpose, was my understanding.

Q. Did you care whether or not it actually reached them, if you could in fact produce evidence which would besmire— A. I would not produce evidence to besmire any living man, if I knew it, unless he deserved it.

Q. Well, that is just what I want. Well, do you think that there ever was any class of people that deserved anything worse than you have mentioned here? A. Might be.

Q. I mean from your standpoint? A. Might be.

Q. Now, when you say, in this affidavit—well, I will withdraw that question. When you consulted with Mr. Tichenor in regard to the method of disposing of this money, you have stated in your direct examination that you told him you desired him to pay it to the Senators—to those Senators, eh? A. Yes, sir.

Q. Why did you say that to him? A. Because I thought that was the most direct evidence that it would be possible to get.

Q. Had you any prior experience in your lifetime in doing anything of that nature? A. No, sir.

Q. And did Mr.—what did Mr. Tichenor say at that time in regard to that requirement? A. He said he would do the best he could.

Q. Yes. When he telegraphed to you that he could not accomplish that purpose, you went to Mr. McNab, did you? A. He telephoned—did not telegraph.

Q. He telephoned? A. Yes, sir.

Q. Now, state the conversation that ensued? A. With Mr. McNab?

Q. Yes, sir—in regard to that specific matter—that telephone. A. I

told Mr. McNab that Mr. Tichenor had telephoned that it was impossible to pay the money himself, and Mr. McNab says: "Well, tell him to use his own judgment in the matter, but to pay it in a way that it would be—that it would be proper proof in a court, that he could prove it in court—that it was delivered, and use his best judgment."

Q. This money, of course, did not belong to the Continental Loan Association, you say? A. Not a cent of it.

Q. Nor to you? A. No, sir.

Q. Nor to Mr. McNab? A. I don't know anything about that.

Q. Nor to any of your directors, so far as you know? A. No, sir.

Q. And as far as the value or loss of the money was concerned, you did not care anything about that? A. Oh, no; it was not—

Q. You did not care whether the money was lost or not, eh? A. Oh, I don't think that is hardly fair to argue that I—if the goods were not properly delivered, why, I would not want anybody to lose their money.

Q. Well, I am not asking you what you want other people to do, but you had no personal interest in whether— A. (Interrupting.) No.

Q. (Continuing.)—the money was lost or not? A. No; no financial interest.

Q. And your only interest was in trying to get a case in which you could bring a prosecution against these four Senators? A. Yes, sir.

Q. That was your only interest and your only purpose? A. Yes, sir.

Q. You have no knowledge whatsoever, personally, in regard to this money, except what you have stated? A. No.

Q. Nothing except the reports? A. That is all.

Q. You say that you know Senator Emmons, do you not, in your cross—in your direct examination? A. Very well, indeed.

Q. Then it is a mistake in your later testimony in saying that you did not know any of these four Senators? A. I will accept the correction; I do know Mr. Emmons.

Q. Yes, sir. A. I only thought of those I knew more honorably; that is all.

Q. Yes, sir; honorably? A. Yes, sir.

Q. When you referred to him in your direct examination you stated that Tichenor had reported that Senator Emmons was willing to take all of the money and distribute it among the other Senators, and you remarked that from what you knew of him you would not want that to occur? A. Yes, sir; that is correct.

Q. What was it that you knew of him that led you to make that remark? A. We loaned Mr. Emmons some money to build a house in Bakersfield—rather to his wife—and the check was sent to Mrs. Emmons, but the contractor that built the house apparently did not use the money paid him, as he should have used it—that is, he paid other bills besides the bills on that house, and the house cost a great deal more than the amount that we loaned; and Mr. Emmons apparently had no money, which we did not know at the time. Mrs. Emmons indorsed the check, and it came back to us as paid, but the house was about half finished. Mr. Emmons appeared on the scene then, when we got to objecting to the matter, and said if we would furnish enough money to finish the house, he would then be willing to make the payments. We did so. Mr. Emmons, after the house was finished, under one pretext and another, did not make any payments. In the meantime—I am a little ahead of my story—we told Mr. Emmons before we completed the

house that we would want a deed to the property from Mr. and Mrs. Emmons, because we were not sure whether he intended to keep his promise or not, because he did not in the first place. So we held the deed to the property and finished the house. Mr. Emmons paid nothing, and we brought a suit. It was stated today that he brought the suit, but he did not; we brought the suit for ejectment. Mr. Emmons claimed in court, in the first place, that the money had never been received by them. We presented these checks, indorsed by the wife, but it made no difference. And he claimed, further, that this deed was only given as a matter for the security, and if we wanted to get him out of the house, we would have to take a different method of procedure. We put Mrs. Emmons on the stand, and Mrs. Emmons testified that she did receive the money, and that she indorsed the check. Mr. Emmons was still in the house under one technicality and another, never paid one dollar one way or the other, and we have been without our money for about two years, without a cent of interest or principal or anything else. That is why I do not like Mr. Emmons personally.

Q. That is the reason—you have got a good deal of grievance against him, I see? A. A whole lot, and I think, reasonable grievance.

Q. But whether reasonable, or unreasonable, you have that grievance personally? A. Most assuredly.

Q. Then Mr. Emmons sued you, did he? A. He did not—we sued Mr. Emmons to get him out of the house.

Q. Did not he beat you? A. The Court held that our suit was improper—we had to bring a different suit.

Q. Judgment went in his favor in that suit, did it not? A. Yes, sir; in that it was improperly drawn; it should have been a suit for foreclosure—something of that kind.

Q. Yes, sir. You heard what Mr. McNab said here to-day in regard to having the report, or a report, that you could lay your hands upon, showing that your company was solvent and correct in all respects—did you hear that testimony? A. I did.

Q. Well, had you ever had such a report as that, why were you not desirous, as long as there were such charges being made in the "Examiner," to lay it before this Committee of Retrenchment and Reform?

MR. GOULD: Just a moment. The counsel is mistaken when he states that Mr. McNab made any testimony of that character. Mr. McNab did say that he did not have the report where he could lay his hands on it; that is the report that he is speaking of.

THE WITNESS: I was just going to correct him in that.

THE CHAIRMAN: As I understand it, he said that he was told by the people who made the report.

MR. CATOR: Q. You claimed to know where there was such a report, did you not? A. No, sir; we did not make any such claim.

Q. Do not you know that you now know that such a report had been made? A. I know that the statement had been made; I did not know anything about the report.

Q. Mr. McNab stated that there had been such a report made? A. I don't know what Mr. McNab stated; I don't remember.

Q. Did you have any fear of appearing before the Committee on Revision and Reform, so far as the condition of your company was concerned? A. Never at all; but we had grave fears as to the men who

were on that committee, by its actions—some of them, I mean. Now, when I say “the committee,” I mean these four always; I do not mean the other three gentlemen.

Q. Did you think that if you could make a perfectly honest showing of the condition of affairs in your company, before that committee, that the Senate here of California would allow you to confirm a report that you had nothing in your treasury? A. I don’t believe the Senate of California would do anything of the kind, Mr. Cator.

Q. Why, then, did you have so much fear of that committee? A. Because the San Francisco “Examiner” does not tell you reports; it makes up its own.

Q. Well, if that is so, then you were subject to this danger, whether the committee made any report or not? A. That is what the committee was to be used for—was to give them just that kind of ammunition that they wanted.

Q. You assumed that? A. Yes, sir; I assumed it; yes, sir.

Q. You believed that when you entered upon this scheme to entrap these Senators, did you not? A. Yes, sir; and I believe it yet.

Q. Did not you feel that if you carried out your scheme that you would upset that purpose of the “Examiner?” A. Yes, sir; we would—certainly did, or we would not have been human if we had not expected it.

MR. CATOR: I think that that is all for Mr. Corbin by myself; my associate here desires to ask him something. There are some questions that I have been asked to put to you, but I do not think I will.

MR. ALEXANDER: Q. You received a telephone message, you say, Mr. Corbin, from Mr. Tichenor here? A. Yes, sir.

Q. I understood you in your direct examination—I might have misunderstood you, however—that Mr. Tichenor’s statement was that all the Senators except Senator Emmons agreed to receive the money personally, but that Emmons would only receive it personally if he received the entire amount; is that correct? A. When I say “all,” I mean these four.

Q. I am referring to the four. A. Yes, sir.

Q. That all of these four, with the exception of Emmons, stated that they would receive the money personally from Mr. Tichenor, but Mr.—but Senator Emmons refused to accept it from Mr. Tichenor unless he received the full amount? A. Yes, sir; he said he was afraid there was too many in the scheme, and he would get exposed.

Q. That statement I made is correct, is it not? A. With that addition; yes, sir.

Q. Yes, sir. Can you tell me the day you say this gentleman came to see you on a Friday—this first gentleman, that you did not know? A. Yes, sir.

Q. How soon did you see Mr. McNab after that? A. Oh, I expect in twenty or thirty minutes.

Q. He called about what time on Friday? A. I think it was about three o’clock in the afternoon.

Q. About three o’clock? A. Yes, sir.

Q. And then you saw Mr. McNab on Friday about twenty or thirty minutes after that time? A. Yes, sir.

Q. And told him this, what had been told you by this gentleman? A. Yes, sir.

Q. And Mr. McNab, at that time, I believe you stated, told you that he believed it to be true? A. He said he was not surprised at it.

Q. That he had had intimations of a similar character himself? A. No, no.

Q. I understood that? A. He said he was not surprised at it.

Q. He said he was not surprised at it? A. And said it was common rumor on the street.

Q. I understood you to say that Mr. McNab had stated that he had had similar intimation himself? A. I do not remember of making any such statement. If I did it was wrong.

Q. Well, would you repeat just the words, if you can, or as near as you can, the statement which Mr. McNab made to you on the occasion of your first visit? A. He said he was not surprised at it; that is about all there was to it.

Q. He did not say why, or that he had received intimation from other sources, or anything of that kind? A. No, no.

MR. ALEXANDER: That is all.

MR. McNAB (to Mr. Corbin): It was at my suggestion that you assisted in the entrapping of these four Senators under the charges, was it not? A. Yes, sir; altogether.

Q. And the instructions you gave Mr. Tichenor were the instructions I requested you to give, were they not? A. They were.

Q. And at the time you made this affidavit, was after I had informed you of the communications that Mr. Jordan had made in San Francisco on Sunday — A. (Interrupting.) Yes, sir.

Q. Was it not? A. Yes, sir.

Q. You were not until afterwards subpoenaed by this Committee on Commissions and Retrenchments, were you? A. No, sir.

Q. And did I not inform you on the—as part of the communication that Mr. Jordan had delivered, that Senator—that he stated that Senator Emmons designed, as part of the work of this committee, to obtain evidence of the compounding of a felony on the part of Dr. Dodge and myself, and engaging in a prosecution? A. Yes, sir.

MR. McNAB: That is all.

MR. CATOR: Q. Mr. Corbin, one question. Has there been any talk between you and Mr. McNab in regard to any points of weakness in this case? A. No.

Q. Has there been any talk between you and Mr. McNab in regard to whether you ought to have Jordan arrested, for the purpose of seeing whether you could strengthen this case by any proceedings that should be taken that way. A. I have never talked with Mr. McNab about Jordan.

MR. CATOR: That is all.

MR. McNAB: That is all.

THE CHAIRMAN: Does any member of the committee desire to question Mr. Corbin?

THE COMMITTEEMEN: No.

THE CHAIRMAN: That is all, Mr. Corbin.

MR. McNAB; That telegram—was that brought here by the manager of the company?

THE CHAIRMAN: Is Mr. Beede here?

(Mr. Beede, Manager for the Postal Telegraph Company, here con-

sulted with Mr. McNab and Mr. Gould, and announced that he was unable to find the telegram referred to.)

MR. CATOR: I do not see what purpose that can serve. There is nobody that has disputed or can dispute it; we cannot—but what this man says, that he telegraphed or telephoned?

MR. McNAB: No; it is not telephone—the telegraphic message that was answered on the 'phone is the one that we want. Well, we can introduce this telegram later, I presume, if you want to have it.

THE CHAIRMAN: What is the trouble?

MR. McNAB: We have not been able to locate it yet.

MR. CATOR: What is it—what telegram?

MR. McNAB: The telegram sent by Mr. Grange to Mr. Jordan, that was answered by telling him to call him up on the 'phone on the afternoon of Monday.

MR. CATOR: Telegram by Mr. Grange?

MR. McNAB: Yes, sir.

MR. CATOR: Not by Mr. Jordan?

MR. McNAB: No, no.

MR. CATOR: I do not see what purpose it can serve. Mr. Grange has testified that nobody answered it.

MR. McNAB: Well, I do not know as it is material.

MR. CATOR: We do not deny that he sent a telegram.

MR. McNAB: You do not?

MR. CATOR: Why, we have not disputed it. We know nothing about it, and cannot dispute it.

THE CHAIRMAN: Is Mr. Beede going to bring the telegram?

MR. McNAB: He is going to hunt it up.

MR. GOULD: His description does not seem to be accurate.

THE CHAIRMAN: Do you want it brought here?

MR. GOULD: No, I guess.

THE CHAIRMAN: Have you any other witness?

MR. GOULD: Mr. Tichenor's cross-examination has not been finished yet.

MR. CATOR: Have you any other witnesses you can put on?

MR. McNAB: No. That is all.

TESTIMONY OF GEORGE N. TICHENOR.

Recalled for cross-examination :

MR. CATOR: Of course, Mr. Chairman, I feel bound, although I do not like to interfere or to do anything unprofessional, I will state that I have a pressure put upon me by the request that has been made, and I feel obligated to ask again that this witness be—his cross-examination be postponed, for the reasons which I have stated in regard to this. We expect to get data upon which to base this cross-examination. Mr. Copeland expects to be furnished with data which will enable us to carry on this cross-examination to better advantage.

MR. SIMPSON: Well, Mr. Cator, can you render any assurance when Mr. Copeland will be able to attend the meetings of this committee?

MR. CATOR: I understand, to-morrow.

MR. ALEXANDER: The position is this: Mr. Copeland is in possession of data, or will be in possession of data, the use of which can only be availed of when he is here.

MR. SIMPSON: I understand; but have you any assurance that he would be here to-morrow?

MR. ALEXANDER: I will state to the Senators that if he is not, we will be prepared to go on. I will state that this is the last witness on the part of the prosecution, and the next thing that will be opened, of course, will be the defense. We are not prepared to go on with the defendant, thinking that the prosecution would take all of this evening and possibly to-morrow; consequently, there will have to be an adjournment until to-morrow. Now, the cross-examination of Mr. Tichenor I do not think will be very lengthy, and could be taken up the first thing when we reconvene.

MR. SIMPSON: Well, no doubt, each of you gentlemen will want to cross-examine Mr. Tichenor.

MR. ALEXANDER: I think that Mr. Copeland will conduct his cross-examination, and he ought to be able to handle it very fully with the data of which he expects to gain possession.

MR. SIMPSON: Mr. Cator, do not you wish to cross-examine Mr. Tichenor yourself?

MR. CATOR: No, I do not say that.

MR. SIMPSON: Well, if you do, now would be the proper time.

MR. ALEXANDER: The further cross-examination will be but a question or so supplementary—not a full cross-examination.

MR. SIMPSON: I would suggest, Mr. Chairman, that if any of these gentlemen desire to cross-examine Mr. Tichenor, this is a proper time, regardless of whether Mr. Copeland examines or not.

MR. ALEXANDER: The questions which we would ask would not be full, but at the most it would be merely supplementary, and would not be in the nature of a cross-examination.

MR. RALSTON: Mr. Chairman, I would like to know what the gentlemen intend to do in regard to bringing their witnesses? Are we going to be able to go ahead with this to-morrow afternoon at 2 o'clock and take up a part of the case which the defense intends to put in, or are we going to have delays and delays and delays and delays until witnesses may be procured and brought here to Sacramento, and so on?

THE CHAIRMAN: Probably the attorneys can offer some suggestions.

MR. ALEXANDER: I might state that a part of us have been actively engaged here, or passively engaged, at least in the conduct of this case, and the procurement of evidence has necessarily been left to others. We are unable at this moment to go ahead with the evidence, because we are not in a position to get it, for the reason that we do not know it. This matter, as the committee recognizes, has been brought on very rapidly. We have been able to get no assistance whatever from the accused Senators; we have known absolutely nothing except from the newspaper report as to what the evidence might be. The names have been kept secret, and we have been brought in here and suddenly confronted by a mass of secret testimony which we have been offered or allowed no opportunity at all to refute. Now, the matters which we desire to present, we will have to have a short time in order to formulate those ideas, and to have them in a shape to present, and I think that from the seriousness of this charge these Senators should be allowed that privilege.

MR. RALSTON: Mr. Chairman, it is not any desire of not allowing the Senators all the time that they wish, and all that they want. My idea

was simply to get some indication from the attorneys as to whether we could proceed, whether that be to-morrow or next day, or when. It was not with the idea of preventing anyone from having all the time necessary to get all their evidence—it is far from my desire to prevent anyone from having a fair hearing.

MR. ALEXANDER: I did not mean to imply that the committee would do that at all; but my statement was to the effect that the procuring of evidence necessarily being in the hands of others, we are not in a position to go ahead, nor to at this moment definitely inform this committee as to just how soon we could go ahead; but we could take up, I think to-morrow, a portion of our evidence as far as it goes, and then give some other convenient time to it, when we would complete the investigation.

THE CHAIRMAN: Have you any list of witnesses that you desire to have subpoenaed?

MR. ALEXANDER: I beg your pardon, Senator?

THE CHAIRMAN: I say, have you any list of witnesses that you desire to have subpoenaed?

MR. ALEXANDER: We have them, not here, but we would have to have them to-morrow, and will get out the list—that is, we would necessarily have to have time to get that list.

THE CHAIRMAN: Well, Senator Emmons, I think it was, to-day—I think this afternoon—stated to me that he understood that there were some witnesses in Bakersfield.

MR. ALEXANDER: We will have to bring witnesses, undoubtedly, from Bakersfield and from Los Angeles.

THE CHAIRMAN: Well, if you desire to bring witnesses from Bakersfield and Los Angeles here you ought to have them subpoenaed at once, so that we can get them here. If we have got to wait until people come from Los Angeles, it appears to me that this investigation is going to go on into next week, and may be eight or ten days, and thereby a great deal of the valuable time of the Senate will be taken up, and it seems to me that you ought to come to some conclusion as to the witnesses whom you desire to have subpoenaed, and leave their names with the committee, so that subpoenas can be sent and have them brought here as quickly as possible.

MR. ALEXANDER: My remarks were merely to the effect that that was a possibility. As for as myself personally, or my associates now here, we know nothing as to what witnesses will be called. We hope to have a consultation and find out. We hope to do that personally. We are at sea in the matter, and must consult in order to expedite putting in the case for the defense.

MR. CATOR: I would like to ask, is this the last witness for the prosecution?

MR. McNAB: Well, we may introduce a document.

MR. CATOR: I know, but is it the last witness, I mean, of oral evidence?

MR. CATOR: Mr. Chairman, the only reason why we are not prepared to state what witnesses we desire to subpoena is that we have not fully determined whether or not we can get along without any. It is our purpose to get along with as few as possible.

MR. SIMPSON: Mr. Cator, my recollection is that Mr. Copeland was not present at the direct examination of Mr. Tichenor.

MR. CATOR: He was present at that time?

THE CHAIRMAN: He was present.

MR. JACOBS: Mr. Chairman, I understand Mr. McNab to say that he has a document that he desires to introduce in his direct case; if that is so, we would like to know something of the nature of the document, so that we may have an opportunity to prepare for the defense as to that phase.

MR. McNAB: Simply—it is only that telegram that I had reference to.

MR. JACOBS: You also spoke of introducing some newspaper articles, Mr. McNab.

MR. McNAB: I do not know, now, just what we shall do about them.

MR. SIMPSON: Well, Mr. Chairman, for the present, I move we proceed with the case, and with the cross-examination of Mr. Tichenor—that is, if the gentlemen who are present should desire to cross-examine him.

MR. RALSTON: And let Mr. Copeland examine him the second time?

MR. SIMPSON: Well, if that is the case, let it be so understood at this time, and then on the adjournment we will not be wasting any time, or losing any time.

THE CHAIRMAN: I think the conclusion of the committee is this. Mr. Cator: That at this time if you desire to cross-examine Mr. Tichenor, that you shall do so, and that if Mr. Copeland desires to make any further cross-examination that he will be granted the privilege later by the committee. Now, if you do not desire to cross-examine Mr. Tichenor, why we will take an adjournment, if the prosecution has—if these other gentlemen have no other witness to put on the stand.

MR. McNAB: We have none, Senator.

MR. CATOR: It is understood that if Mr. Copeland desires to examine him to-morrow morning or at the next session, that he will remain here and be further examined?

MR. McNAB: He will be subject at any time to the request of this committee.

THE CHAIRMAN: Yes, sir.

MR. CATOR: It is understood that Mr. Copeland is supposed to have certain data to use for cross-examination that I have not.

THE CHAIRMAN: Yes, sir.

MR. McNAB: Might I suggest this, that Mr. Tichenor be not required to remain in San Francisco—I mean be not required to remain detained in Sacramento from day to day unless the defendant has use for him, because his duties in San Francisco call him; but he will take any train on the telephonic or telegraphic or postal notice that he is wanted here. I have not the least objection, nor has Mr. Tichenor, to remaining here and being cross-examined, but I understand that the committee might not sit for several days, and this witness would be in attendance without being useful.

MR. RALSTON: We want to sit every day and be through with this, if we can.

MR. GOULD: Well, what do I understand the ruling of the committee to be in regard to Mr. Corbin? Is there any further reservation for him?

THE CHAIRMAN: I do not understand that there was, but that Mr. Corbin, if they desired to have him return, might do so at some other time—for instance, day after tomorrow, or some other day.

MR. McNAB: May it please the committee, all of the witnesses that have been presented by our side will be in attendance at any time on any informal notification.

THE CHAIRMAN: As I understand the proposition now, of the cross-

examination of Mr. Tichenor, is this: That if these gentlemen so desire they may now cross-examine, and if Mr Copeland desires to cross-examine Mr. Tichenor tomorrow that Mr. Tichenor shall stay here until tomorrow to wait for Mr. Copeland, and then if he does not care to have it then, Mr. Copeland can say when he would desire to have Mr. Tichenor; but that Mr. Tichenor would be required to meet with the committee at its meeting tomorrow in order to give Mr. Copeland an opportunity to cross-examine, if he so desires. Is that the understanding of the committee?

THE COMMITTEE: Yes, sir.

THE CHAIRMAN: Do you desire to proceed with the cross-examination. at present?

MR. CATOR: Yes, sir; we will cross-examine him, with the understanding that Mr. Copeland may do so, also.

THE CHAIRMAN: That is understood.

MR. SIMPSON: Mr. Chairman, I move that when this committee adjourns that it adjourn to meet again at 3:30 to-morrow afternoon, in this room.

MR. GOULD: I would ask the committee if it could not be arranged so as to meet to-morrow evening. I have very urgent business matters—both Mr. McNab and myself—to attend to in San Francisco, and if it meets with the convenience of the committee, it would be conferring an obligation if you could arrange it so we could be there for a short time. We could be here to-morrow evening without serious inconvenience, and the time will be so short to-morrow afternoon.

THE CHAIRMAN: All right.

MR. McNAB: I understand that it is not absolutely certain that the other side will be ready to go on, save with the examination of this witness, to-morrow, anyway.

THE CHAIRMAN: Well, it has been moved and seconded, that when this committee adjourns, that it adjourn to meet to-morrow evening at 8 o'clock.

(The motion was carried.)

THE CHAIRMAN: And it is now understood that if Mr. Copeland desires to cross-examine Mr. Tichenor, he is to do it to-morrow evening.

THE CHAIRMAN: Proceed, Mr. Cator.

MR. CATOR: All right.

MR. CATOR: But any cross-examination the rest of us desire to make, we will make now?

THE CHAIRMAN: Well, I do not suppose that the committee will be captious about that matter; they will allow you to ask a question or two to-morrow night. They have been pretty liberal, and want to be. The main thing is that we want to get in this time good, as much as we can, so that to-morrow night, if possible, we might be getting somewhere near the close of the testimony, and to get at the close of the investigation as soon as possible.

MR. JACOBS: Do I understand, Mr. Chairman, that Mr. Hartling, or Mr. Corbin, or Mr. McNab have been excused from further attendance?

THE CHAIRMAN: No. I understood Mr. McNab to say that all of the witnesses will be at the pleasure of the committee, except Mr. Corbin. I understand he is going down to-night.

MR. McNAB: Yes, sir. I understood, if the committee please, there are several that were going down this evening, but subject to call by the

committee. If the committee will send me a telephone message, or have the sergeant-at-arms, or a postal notification, I will have any one of the witnesses here just as soon as we can get him here on any train; but I understood from the other side that there was no real likelihood of their going on to-morrow evening. I thought it was not doing the committee any good, or the other side any good, or these men any good, to wait in Sacramento.

MR. JACOBS: Well, Mr. Hartling—we may want to examine Mr. Hartling.

MR. McNAB: Well, he will be here.

THE CHAIRMAN: When—to-morrow night?

MR. JACOBS: I think to-morrow night; yes, sir.

THE CHAIRMAN: Well, do you want to have Mr. Hartling here to-morrow night?

MR. JACOBS: We would like to; yes, sir—Mr. Hartling and Mr. Tichenor.

THE CHAIRMAN: You are not prepared to cross-examine Mr. Hartling further to-night?

MR. JACOBS: No; I would state that we have sent for certain information that it would be impossible for us to obtain until some time late to-morrow afternoon, and we cannot use it, of course, until we have received it.

THE CHAIRMAN: Then if there is no objection on the part of the committee, Mr. Hartling will remain.

MR. McNAB: Mr. Hartling, do you hear the committee ask you to be here to-morrow night at 8?

MR. HARTLING: Yes, sir.

THE CHAIRMAN: To-morrow night at 8 o'clock, Mr. Hartling.

MR. McNAB: And Mr. Tichenor is requested to remain until to-morrow night at 8 o'clock, as well.

MR. JACOBS: Yes, sir; I understand.

Cross-Examination.

MR. CATOR: Q. Mr. Tichenor, where do you live? A. 113 Webster street, San Francisco, California.

Q. How long have you lived there? A. About two years.

Q. Where did you live prior to that? A. On Elgin Park—56 Elgin Park, San Francisco.

Q. Well, I do not refer to streets, but how long have you lived in San Francisco? A. I have lived in California on and off since 1874.

Q. Where did you live prior to that? A. Prior to that?

Q. Yes, sir. A. I lived back in New York State.

Q. What part of New York State? A. Brooklyn City.

Q. What? A. Brooklyn City.

Q. How old are you? A. Born in '56.

Q. And you have lived in California since '74? A. Since '74; yes, sir.

Q. Then you were how old when you came to California? A. Born in '56.

Q. Were you engaged in any business before you came to California? A. No, sir.

Q. What? A. No, sir.

Q. What was the first business in which you were engaged in this State? A. In the tobacco business, sir.

Q. In what place? A. Cigar and tobacco business.

Q. What? A. On Seventh street, Oakland.

Q. How long were you engaged in that? A. Oh, I think about three years.

Q. And what was the next business you were engaged in? A. The next business I was engaged in was the ice and soda business in Arizona.

Q. How long did you continue in that there? A. About ten years, sir.

Q. What? A. About ten years.

Q. At what place? A. Tucson, Chino County.

Q. What was the next business? A. The next business? I done some speculating.

Q. At what point? A. San Francisco, California.

Q. What? A. San Francisco, California.

Q. Well, what was the next business? A. The next business I was engaged as a Pullman conductor.

Q. At what point? A. San Francisco, California.

Q. And where did your route run from? A. Out of San Francisco.

Q. To what point? A. Several points.

Q. How long were you engaged in that capacity? A. About a year and two or three months.

Q. In what capacity—conductor? A. That is about all that they employ men for, yes, sir—unless I was a colored man, and that I did not happen to be, and so I must have been employed as a conductor.

Q. About a year and a half, you say? A. About a year and a half, I should judge; yes, sir.

Q. How came you to leave their employ? A. Well, discharged.

Q. Discharged? A. Yes, sir.

Q. For what? A. For cause.

Q. What cause? A. I don't know, sir.

Q. Never found out? A. Never found out; no, sir.

Q. And never tried to find out? A. No, sir.

Q. What did you engage in next? A. Next I was with the Rock Island excursion running between San Francisco and Boston and New York.

Q. What was the nature of your duties in that position? A. I was an excursion conductor.

Q. Conductor? A. Excursion conductor; yes, sir.

Q. How long did you remain in that capacity? A. I remained in that capacity for about a year and a half.

Q. And how did you come to leave that? A. I left that for the simple reason that my transportation was taken away from me.

Q. Who did that? A. Mr. Goodman, the general passenger agent of the Southern Pacific.

Q. Did you ever inquire why he did that? A. Yes, sir; I knew why he did it.

Q. Why? A. I had some trouble with the Pullman porter—the Pullman conductor out of Ogden—and he reinstated me, Mr. Goodman did; I have his letter of reinstatement.

Q. How long did you continue after the reinstatement? A. I did not continue.

Q. What? A. I discontinued for good when I was discontinued.

Q. Oh, you never accepted the reinstatement? A. No, sir.

Q. What was your next business? A. My next business was with the Pinkerton people.

Q. At what point? A. San Francisco, California.

Q. How long were you with them? A. Oh, I guess I was with them seven or eight years.

Q. And when did your connection with the Pinkertons terminate? A. July, last year.

Q. How came that to terminate? A. I got a better position.

Q. With McNab and Corbin? A. No, sir; with the Continental Building and Loan Association.

Q. Oh! A. Yes, sir.

Q. What was your position with them? A. I was inspector of agencies for the Continental Building and Loan Association.

Q. Does that involve selling these contracts? A. No, sir.

Q. Oh! A. That involves looking after the different agencies around the State.

Q. You say you have been in that capacity since last July? A. Since last July; yes, sir.

Q. And since that period, have you engaged as a general detective in anything except this job? A. No, sir.

Q. This is the first detective work you have done since then? A. I do not consider this detective work, sir.

Q. Is not this the same kind of work that you were employed in while you were with Pinkerton? A. I presume that it is; you might say the work is detective work; detective work is nothing but a close investigation of anything that occurs.

Q. Why did you say that you did not consider it detective work? A. Oh, well, for the simple reason that I do not.

Q. Why not? A. Because I consider it simply a part of my business.

Q. You say you never had any such duties with this company before? A. Oh, I am continuing to have such experiences right along, sir.

Q. Since you have been employed by this company, have you been employed, or have you been given any money to try to put in the hands of legislators or members of other legislative bodies or officers of any locality? A. I think this is the first Legislature that has been convened since I have been in that office.

Q. Yes, sir. A. Yes, sir.

Q. Then it is not a fact that you have performed any such services except this since you have been with them? A. These particular services like this? A. No, sir.

Q. These particular services? A. No, sir.

Q. This is the only time in which you have had occasion—— A. The only time.

Q. (Continuing.)—to carry money to a place and try to give it to any member of a legislative body or party or officer? A. This is the only time that I have ever been given money to carry to a place and have given it to those particular people; yes, sir.

Q. Well, how about your period of service with Pinkertons—did you do anything of that kind during that period? A. You ask Mr. Pinkerton, sir.

Q. You decline to answer on the ground that the secrets are not revealed? A. Most assuredly, I decline to answer; you may go there and ask Mr. Pinkerton, sir.

Q. You won't say that you have not? A. I will not say anything.

Q. Were you engaged ever, while you were with the Pinkertons, in a matter at Bakersfield? A. Inquire from the Pinkerton people, sir; they will tell you. They have a record of all my operations.

Q. What is that? A. You inquire from the Pinkerton people, they have a record of all my operations.

Q. Well, I am asking you. A. I am telling you what to do, sir.

MR. CATOR: Well, I will ask the committee for a ruling on the subject.

THE CHAIRMAN: Read the question that was asked.

(The Reporter read the question referred to, as follows: "Were you engaged ever, while you were with the Pinkertons, in a matter at Bakersfield?")

WITNESS: I would say to the committee that while I was employed by the agency that much of the work was secret work, and then I reported to all of those persons, and I don't think that I should be called upon before this committee to reveal any of the secrets of my work as—with them as a detective.

MR. CATOR: I have not asked you yet to reveal anything. A. Did you not—why, certainly you have.

Q. I have asked you if you were employed at Bakersfield by them? A. I told you to ask the Pinkerton people; they will tell you.

MR. CATOR: Well, I will ask for a ruling on the question whether I may ask this witness whether he was employed at Bakersfield.

MR. ROWELL: It would seem to me, Mr. Cator, that if you want to impeach the character of this witness, you can do it with witnesses, but to make this witness reveal the character of the services that he has rendered, or the duties, is not within the province of the committee here.

MR. CATOR: I am not asking the character of the services; I am asking whether he was employed at Bakersfield. I will not question him about what the details were.

THE CHAIRMAN: The committee understood you to ask him if he was employed by the Pinkertons there.

MR. SIMPSON: Well, Mr. Chairman, the way I feel about this case is that while there may be no valid objection to this particular question as far as it goes, yet that the nature of any particular employment, or what was done at Bakersfield by this witness, would be properly excluded. It would not be proper here; the witness would be justified in refusing to answer it.

THE CHAIRMAN: Well, then it is the opinion of the committee that the question is not a proper one?

THE COMMITTEEMEN: Yes, sir.

THE CHAIRMAN: The opinion of the committee is that the question is not a proper one.

MR. CATOR: I will ask the committee to note our exception, and we may or may not desire to bring our exception before the Senate; I do not know; but I shall be obliged if the Reporter will note it. If the Chairman will allow an exception to be noted. It may be that we will never raise it again.

THE CHAIRMAN: The Reporter will note the exception.

MR. CATOR: Q. Had you any acquaintance with Mr. Emmons at Bakersfield during the period that you were with the Pinkertons? A. You ask the Pinkerton people; they will tell you.

MR. CATOR: I ask for a ruling on that question, whether he was acquainted with Mr. Emmons during that period.

MR. SIMPSON: I think, Mr. Chairman, that the question is proper. It does not necessarily connect the witness in any way with his services to the Pinkertons.

WITNESS: It surely will.

MR. SIMPSON: It relates to his acquaintance as an individual with Senator Emmons, and I think the question to that extent is proper.

MR. CATOR: It is a matter that his employment has no bearing on.

THE CHAIRMAN: What was the question? Just read that question again. (The Reporter read the question.)

MR. SIMPSON: Mr. Chairman, I would suggest that the question is a proper one, in that it merely relates to the acquaintanceship of this witness with Senator Emmons at a certain time, namely, when he was in the employ of the Pinkerton agency, and fixes it with reference to that time, and it is perfectly proper, and I would suggest that the witness be instructed to answer the question.

MR. McNAB: Might I offer the committee a suggestion? It seems that this witness is delicate about the construction that is placed upon his answer, as requiring, perhaps, a connection between the business he was employed in at that particular time, as identifying him with some particular individual. There is no difficulty in Mr. Cator asking him when he knew Mr. Emmons—where he knew Mr. Emmons—that does not connect the Pinkerton agency. The witness seems to feel that he commits a breach of confidence, and that something in the way of an inference may be drawn from the circumstances of his acquaintanceship being attached to his employment by the Pinkerton agency. It certainly would not be an inference that Mr. Emmons should desire to have prevail, and it is detrimental to this witness in the trust that he occupied, in his opinion, where there is no reason for attaching the Pinkerton agency to the question at all. If he knew him one time, he knew him, however he knew him.

MR. SIMPSON: Well that being the case, can we instruct Mr. Cator how he must frame his questions, Mr. McNab? I do not think we can.

MR. McNAB: I just merely offered that suggestion.

MR. SIMPSON: It refers to a certain time; that is all. We have no power to direct Mr. Cator to frame his questions in a certain manner. We must take the question as we find it. Personally, I believe there is nothing objectionable in it—that it merely relates to a certain time, and has no other bearing.

MR. ROWELL: I do not think there is any testimony on the part of the committee—I want to ask Mr. Cator this question: Do you think it would be proper to get a witness here and to make him divulge the relations of himself and his employer? If any man was in a confidential relation with any employer, then would it be proper here at this investigation, where the question of character was not involved, or, at any rate, had no bearing on this question, to bring out these relations?

MR. CATOR: Well; I have not asked that; still I have no hesitation whatever in saying that, no matter what it revealed with regard to his character or to his employment with the Pinkertons, if it bore in any way in showing that he had any animus or any relations with Mr. Emmons, that, under the rules of evidence, would be proper to show here. That would be no way related to the question of the duties he is performing now. I have not asked, yet, anything of that kind.

MR. ROWELL: I do not think there is any disposition on the part of this committee to exclude anything in the way of evidence that would throw light upon the questions involved. I was not aware that the witness was under prosecution, or that Mr. Corbin, or any other witnesses here were under prosecution.

MR. CATOR: The motives of a witness are always proper subjects of inquiry, Senator, as any of the lawyers on the committee will tell you, and it is for that reason that Mr. Corbin, Mr. McNab, and all the others were examined as they were. They all admitted that they knew nothing about the substance of this charge, but they were examined as they were for the purpose of showing the animus and the motive which they had, and how powerful that motive was, with the view of its being in the future argued what might be the result—what men might do under such an impulse.

MR. ROWELL: The only objection I offer is this: Find what motive you please, but I do not think that you have any right here to make this man divulge his relationship to the Pinkertons or to any other employer.

MR. CATOR: Well, I, of course, leave it to the committee, and must do so whenever a question is being asked that may involve that. I do not think that the present question asks for any divulging of his relationship.

MR. RALSTON: Why not leave the word "Pinkerton" out of it?

MR. SIMPSON: Well, Mr. Chairman and Senators—I beg pardon for interrupting you—It seems to me that we cannot dictate to Mr. Cator in what form his questions are to be presented, providing only they are proper questions. Now, this question seems to me to be proper. I would suggest that he be allowed to consult with his counsel before he formally declines to answer it.

THE CHAIRMAN: It seems to me that the question is a proper one, in that it merely—the question is whether the witness knew Senator Emmons while he was—

THE WITNESS (Interrupting): No objection at all in reference to answering the question in that way.

THE CHAIRMAN: While he was employed by the Pinkertons—

THE WITNESS (Interrupting): Yes, sir.

THE CHAIRMAN: Now, that is merely the time. During the time that you were employed by the Pinkertons at Bakersfield, did you know Senator Emmons? It strikes me that that is a proper question. I do not see any objection to that; I do not see it asks you to divulge anything of your work that you did for the Pinkertons; it merely suggests a time when you were employed by certain people. Did you know Senator Emmons? That is the way I understand the question—is that right, Mr. Reporter?

(The Reporter read the question. "Had you any acquaintance with Mr. Emmons at Bakersfield during the period that you were with the Pinkertons?")

MR. SIMPSON: Is there any objection to this question on the part of counsel?

MR. GOULD: We have none; I think it is a proper question myself; I agree with the committee.

THE CHAIRMAN: The decision of the committee is, it is a proper question.

(The Reporter read the question.)

A. Yes, sir.

MR. CATOR: Q. How long did your acquaintance with Mr. Emmons continue? A. Oh, I should judge over a period of about two months; now, I won't be positive about that; I should say from a month to two months.

Q. Has anything brought you into any collision or conflict with Mr. Emmons at any time? A. No, sir; right the reverse. Mr. Emmons was employed by me.

Q. He was employed by you? A. Yes, sir; indirectly employed by me.

Q. Was he not Assistant District Attorney at the time? A. No, sir; he was not Assistant District Attorney at the time; he was a practicing attorney in the City of Bakersfield, Kern County, State of California.

Q. Did you know him when he was Assistant District Attorney? A. Did not; no, sir.

Q. What? A. No, sir.

Q. Did not know him at that time? A. No, sir; not before.

Q. Was it before or after that time? A. I do not know; I never knew that he was the Assistant District Attorney of Kern County.

Q. What time was it that you knew him for two months? A. Oh, that was —

Q. Years? A. That I cannot tell, because I have—I would have to refer back. Ask Senator Emmons. I can't tell you what time it was; I have forgotten now, and can't tell you; two or three years ago, though—perhaps three or four years ago; I don't know.

Q. Now, you say that when you came to the City of Sacramento and sent the telephone that you could not deliver this money in person to these four Senators, that you marked some of these bills with a letter? A. That was prior to that, sir.

Q. Was it on that day? A. No, sir.

Q. Where was the—where were these letters put upon those bills? A. The letters were put on those bills in room 73 of the Western Hotel on the night of January the 23d, after I had arrived from San Francisco.

Q. And how many bills did I understand you to say you put letters on? A. On four, sir.

Q. One in each package? A. One in each package; yes, sir.

Q. That is, you understood that three of these packages— A. (Interrupting.) Four—

Q. (Continuing.) Oh, four of them—one in each of the packages that were supposed to be delivered to the Senators? A. Yes, sir.

Q. Were any of the bills that you delivered to Mr. Jordan, that you say was in compensation for his services in the matter, marked by you? A. No, sir.

Q. What? A. No, sir.

Q. Then all the bills that you marked were four? A. Were four; yes, sir.

Q. Four fifty-dollar bills? A. Four fifty-dollar bills; yes, sir.

Q. And you have designated here the letters which you placed upon them? A. Yes, sir.

Q. What was your object or purpose in marking only one bill in each package? A. Oh, for the purpose of further identification.

Q. What? A. For the purpose of further identification of the bills.

Q. Had there been any conversation between you and any other person prior to your marking them, on that subject? A. No, sir.

Q. What? A. No, sir.

Q. It was not done because of anything that had been said between you and anyone at San Francisco? A. No, sir.

Q. Purely as a matter of your own judgment? A. Purely as a matter of my own judgment; yes, sir.

Q. Did you speak to anyone else in regard to having done that? A. No, sir.

Q. What? A. Not at that time; no, sir.

Q. Did you on the following day? A. I did; yes, sir.

Q. To whom? A. To Mr. Hartling.

Q. What did you say to him about them? A. I exhibited to him the bills which were thus marked—on which this mark had been placed.

Q. Why did you exhibit them to him? A. For the purpose of having him have a further identification of those particular bills.

Q. Did you state to him any purpose you had in regard to it—any particular purpose? A. That was the purpose. No, I did not state it; I told him that I had marked—that I had put a private mark by letter on these particular bills, and would like to have him see them.

Q. When you ascertained from Mr. Jordan, as you say you did—he came and told you that you could not deliver this money to the Senators in person, you stated in your direct examination that—well, in substance, that the matter was off. A. I told Mr. Jordan that I was afraid that the matter was off; yes, sir.

Q. Why did you make that statement to him? A. For the simple reason that in my first conversation with Mr. Jordan, I told him that I must deliver this money myself, and that that was the understanding that I had with the representative from the Renters' and from the Phoenix Building and Loan Association.

Q. What was the exact conversation between you and the person who gave you these instructions in San Francisco on that point? A. The instructions were for me, if possible, to pay the money over to the Senators as named—giving the names of Senators Bunker, French, Emmons, and Wright—and that I could consummate those arrangements through one J. Jordan, who resided at 116 Seventh street, Sacramento, and that I was to use the name of William Newell in presenting myself to Mr. Jordan.

Q. Did you say anything to the persons giving those instructions, giving your views on the subject? A. No, sir.

Q. At the time they were in there? A. I did not.

Q. You made no observations in regard to it? A. No, sir.

Q. Made no observations to the persons as to what you thought was necessary or the best method of giving this money? A. To the persons you mean. You put that in the singular or in the plural?

Q. At the time that either Mr. Corbin or Mr. McNab, whoever it may have been, gave you such instructions to deliver this money in person, was there any observation made by you to them on the subject of how it should be best done? A. I do not understand what you say by "them."

Q. Who was the person who gave you the instructions? A. Mr. Corbin.

Q. Did any one else give you the instructions? A. No, sir.

Q. He was the only one? A. He was the only one.

Q. I was laboring under the impression that Mr. McMab said he also did. A. No.

Q. Is it not a fact, really, that you suggested this to Mr. Corbin, rather than that he gave the instruction to you? A. No, sir.

Q. Came absolutely from him, did it? A. I received the instructions.

Q. Yes, sir; did not you think it a little strange that, inasmuch as you had acted for eight or nine years in the capacity of a Pinkerton detective, and he had never had any experience in such matters at all, that he should give you the instructions to do all this, instead of your observing how it would be best to accomplish it? A. Generally, clients gave instructions while I was in the employ of the Pinkerton Agency. Clients gave instructions to the operatives, and we would follow out their instructions, and they paid for it; and in this instance Mr. Corbin gave the instructions, and I followed them out.

Q. Is it not almost universal, in the employment of a detective to do a thing of that kind, to employ him because he is supposed to understand the details better than others? A. I guess—as a rule—I guess every man understands his own business best, and in giving instructions in investigations, I think that he gives instructions to agree with the business methods of his business.

Q. Why did you take this instruction from Mr. Corbin as to the details of how this money was to be delivered, without any observation on your part as to what would be the best method? A. I did; yes, sir.

Q. And you communicated to Jordan that these were your instructions? A. I met Mr. Jordan at about 1:45 in the afternoon of January the 24th. When he came into the room at one hundred—1116 Seventh street, he introduced himself to me as Mr. Jordan, and I introduced myself to him as Mr. Newell, and I told him the purpose of my—the object of my visit—what I was there for, and then we arranged as regards to the—to the payment of these Senators.

Q. Well, now, Mr. Tichenor, you probably have stated all that in your direct examination. The question I asked you was, whether you stated to Mr. Jordan, without reference to the time of day, what your instructions were as to the method of delivering this money? A. Yes, sir.

Q. What? A. Just exactly what I stated in my direct examination—what took place.

Q. What was that? A. That I was to come to Sacramento and see him and arrange for the payment of the money to Senators Bunkers, Emmons, French, and Wright.

Q. Did you tell him that you were to arrange to do it in person? A. In person; yes, sir.

Q. Yes, sir; you told him that, did you? A. Yes, sir.

Q. Now, where was he when you told him those words? A. At 1116 Seventh street.

Q. Where was Hartling at that time? A. Hartling was on the outside.

Q. In the street? A. In the street; yes, sir.

Q. Now, up to the time that he told you that could not be done, you had expected to be able to do it in that manner, had you not? A. Yes, sir.

Q. What? A. Yes, sir.

Q. Now, when you brought Hartling along with you, what did you expect Hartling to do at the time that you should deliver this money in person to these Senators. A. I expected that Hartling would see the delivery, if possible, of this money.

Q. You expected, then, that you would deliver it in person, and that Hartling would see you deliver it in person; that was what you first expected Hartling to do?

Q. How did you expect that that would be accomplished? A. Well, that I couldn't say; that depended upon conditions.

Q. Yes, sir. Did you have any conversation with Hartling or Jordan as to any of that again? A. With Mr. Jordan, I had; yes, sir.

Q. And did you tell him how you expected to utilize Hartling in connection with it? A. I did not; no, sir.

Q. Did you at any time tell Mr. Jordan that Hartling was with you? A. I did not; no, sir.

Q. He was ignorant of that? A. He was; yes, sir.

Q. Did you, at any time—you never spoke to him on the question as to whether Hartling could be concealed in any place, so that he could observe you pay this money? A. No, sir; I did not.

Q. How did it happen that, when you expected to do it in that way, that you did not mention to Mr. Jordan anything about Hartling? A. For the simple reason, had I made mention of that fact to Mr. Jordan, we would never have got the opportunity to pay anything over.

Q. Mr. Hartling said something about expecting to be concealed in a house; was there any talk between you and him as to that method? A. If I could have concealed Mr. Hartling in the house, and the money had been paid there, I should have endeavored to have concealed Mr. Hartling in the house; yes, sir.

Q. Well, then, you had that method in mind if it could be brought about? A. If we could bring it about; yes, sir.

Q. That was your original conception if it could prove feasible? A. Yes, sir.

Q. And when Jordan told you that could not be done, you used these words—that the matter was off? A. I told him that I thought that the deal was off; yes, sir.

Q. Did you think it was off? A. I did; yes, sir.

Q. What made you think it was off? A. For the simple reason that if I could not pass the money myself, and have proof of the passage, I did not believe the money would be paid.

Q. And was not it because you thought that unless you did have proof of it in that way, that you would not have satisfactory proof? A. Certainly.

Q. What? A. Certainly.

Q. That is what you thought? A. Why, that is reasonable to suppose, isn't it?

Q. You had, prior to that time, considered the matter fully as to what would be satisfactory proof, had you not? A. Yes, sir.

Q. And you had reached that conclusion? A. Yes, sir.

Q. And that was your belief and idea when you sent the telephone to San Francisco, was it? A. It was; yes, sir.

Q. And then you received a telephone to do your best—do the best you could? A. Yes, sir.

Q. It was only after you received that telephone that you changed your mind in regard to the idea that there could be no other satisfactory way, was it? A. After receiving that telephone message, I then met Mr. Jordan near Hanlon's saloon, at the corner of K and Eighth street.

Q. Now, just a moment. I wish you would answer the question; I am not asking you where you met him. I asked you that if, after you received the telephone to do it in the best way you could, was it then for the first time that you conceived the idea that there could be a satisfactory method other than what you had thought before? A. After receiving that—after telephoning that message to San Francisco—I met Mr. Jordan on the corner at or near Hanlon's saloon, on the corner of K and Eighth street, and I told him that if he would deliver the money in person to the several Senators, so that I could see it, that it would be satisfactory to me.

Q. Now, was there anything said in regard to the details of how that should be done, or as to how far away you should be? A. No; not as to how far away I should be; no, sir.

Q. Nothing said as to the distance? A. No, sir.

Q. Between you and Jordan? A. No, sir.

Q. But you thought that he was to deliver the money so that you could see it? A. So that I could see it; yes, sir.

Q. What did he say to that? A. I told him that such a bargain would be suitable to me.

Q. How came you to reach the conclusion that that would be a satisfactory method, after having previously considered that there was no way in which it could be satisfactorily as evidence unless you delivered it in person? A. I would have preferred delivering it in person, and that was the next best proposition I could get.

Q. That was the next best? A. The next best.

Q. Then you resorted to that as a necessity and not as a choice. A. No; I accepted that—

Q. (Interrupting.) Yes, sir. A. As the next best method.

Q. Well, it was the only other; it was the only other method that you proposed, was it not? A. The only feasible one that I saw, whereby I could gain the evidence.

Q. Yes, sir. Had you ever had, prior to that time, any opportunity to know whether that would be a satisfactory matter or method in a like manner—in a like matter? A. You ask the Pinkerton agency as regards to that.

Q. Well, I do not wish, of course, my friend, to inquire into anything that you did for the Pinkertons; I do not know whether you did for the Pinkertons or not. If you are willing to answer the question, I will ask you whether or not, when you concluded to attempt this method—. A. (Interrupting.) Yes, sir; I did.

Q. (Continuing.) —whether or not you had had any previous experience at all which enabled you to believe that it was satisfactory? A. Yes, sir; many times I have passed marked money; yes, sir.

Q. You have passed marked money many times? A. Yes, sir.

Q. What? A. Yes, sir; I have presented marked money many times to people for future identification.

Q. Yes, sir. Now, it is as you observed—this was about a week ago, eh? A. About a week; yes, sir.

Q. You observe how early the lights are lighted here now, about 5 o'clock in the Senate room? A. Yes, sir.

Q. And it has been testified by Mr. Hartling that that was a cloudy night, eh? A. It had been raining all of that day and afternoon; yes, sir.

Q. Yes, sir. A. But that evening the stars were shining part of the time.

Q. Yes, sir—stars were shining? A. Stars were shining part of the time.

Q. Now, sir; when this money was delivered to Emmons—to Senator Emmons, on K street, east of Eighth, you stood upon the opposite side of the street, did you not? A. I did; yes, sir.

Q. And were you directly opposite to them, or catcornered? A. Almost directly opposite.

Q. Did you see Hartling at the time? A. I did not; no, sir.

Q. Did not observe him? A. I saw him just a few minutes before standing down on the corner—on the corner of the same side of the street or on the corner below?

Q. But at that time, you did not look to see where he was located? A. No, sir; I was looking at Mr. Jordan and Senator Emmons at that particular time.

Q. How soon after Senator Emmons received the money, according to your statement, or as you say he did, did you take your eyes off of Senator Emmons and Mr. Jordan? A. Not until after they started up the street, and then after Mr. Jordan had shaken hands with Senator Emmons and he had proceeded on up the street; I then casually walked up on the opposite side of K street myself.

Q. Did you, before you walked, cast your eye to see if you could see just where Hartling stood? A. No, sir; I did not.

Q. Did not you feel greatly interested to know just where Hartling was at the time? A. No, I was after Jordan more than anybody else just at that particular time, after he left Senator Emmons.

Q. After he left him? A. Yes, sir.

Q. But I am speaking in regard to the moment of the delivery of this money by Jordan to Emmons, did not you feel interested in observing where Hartling stood in order that you might know how near he was to the situation? A. No, sir.

Q. What? A. No, sir; I was letting Mr. Hartling attend to his part of the affair, and I was attending to mine.

Q. Well, could not you, by glancing around, have seen whether he stood —

A. (Interrupting.) Oh, yes, sir.

Q. (Continuing.) Within twenty or thirty or forty feet? A. Well, I guess I could have done that, but I did not do it.

Q. Well, was not it a matter of vital interest to you, inasmuch as you were using him for that purpose, to see how near he was to observe it? A. The vital interest to me was to see the passage of that money.

Q. But you say that you did not consider it a safe matter unless you had some one else also observing it? A. No, sir; that was for future evidence.

Q. For additional evidence? A. Yes, sir, for additional evidence; yes, sir.

Q. Well, then, did not you consider, as you were the leader and had charge in the matter, and Hartling was in your employ in the matter, to look and see how near Hartling was standing? A. Well, as a rule, people who have been employed in that particular business know what is expected of them.

Q. You did not observe it? A. No, sir.

Q. Your interest was in simply watching Jordan? A. I was watching Jordan and Senator Emmons; yes, sir.

Q. After he had paid the money to Senator Emmons, of course; after you saw what you claim—saw this money passed to Emmous, why, the thing you were observing had transpired, had it not? A. Which—after the payment of the money?

Q. That is the act which you were so interested in seeing, you say; as far as you are concerned, it ended, did it not, with the passage of the money to Emmons? A. It ended; yes, sir.

Q. Was not it more important, then, to look to see where Hartling was observing it, than it was for you to look over there after Jordan at that moment? A. No, sir, for the simple reason that I wanted to meet Mr. Jordan after having passed that money to him.

Q. But as it would have taken but a glance or sweep of the eye to look where Hartling was, and you did not see him come across to where you were, you could have done that while he was coming across, could you not? A. But I did not do it.

Q. You did not do it? A. No, sir.

Q. No, without doing it, you waited for Jordan to come across. A. Yes, sir.

Q. And where do you say that Emmons stood in relation to a cigar store? A. Mr. Emmons stood in front of the second cigar store on K street, above Eighth. There is a little cigar store on the corner; then comes another store of some description, and he stood on the edge of the sidewalk in front of the second cigar store.

Q. He stood right out, pretty well on the edge of the sidewalk? A. Pretty well on the edge of the sidewalk; yes, sir.

Q. And which way was his back—east, or towards the street? A. His back—Mr. Emmons' back was turned towards Ninth street.

Q. Towards Ninth street? A. Yes, sir; he was facing Eighth.

Q. He was facing Eighth? A. Yes, sir.

Q. And then Mr. Jordan stood with his back facing—— A. Facing Eighth street.

Q. (Continuing.) And his face facing towards Ninth? A. Towards Ninth; yes, sir.

Q. Did he also stand pretty well on the edge of the sidewalk? A. Yes, sir; they stood together.

Q. What? And the cigar store was in front of them? A. The cigar store was at the side of them.

Q. Yes, sir—that is, at the side of them? A. Yes, sir.

Q. And you were comparatively directly opposite? A. I was at the telegraph pole almost directly opposite; yes, sir.

Q. Were you standing on—did you stand in, or attempt in any way to conceal yourself? A. No, sir.

Q. Were you behind the telegraph pole in any way? A. No, sir.

Q. What? A. No, sir.

Q. Could they see you distinctly if they had looked? A. If they had looked; yes, sir.

Q. Did you see—did they look around to see if they could see you? A. No, sir.

Q. Did not observe Mr. Emmons or Jordan to look around? A. No, sir.

Q. Cast no looks around to see if there were men in the vicinity on the sidewalk near them? A. No, sir.

Q. Nothing of that kind? A. Not that I observed.

Q. Well, you were looking to see if they did? A. I should have observed it if they had; yes, sir.

Q. Yes, sir. Now, as you stood there, you say that this first package that he took, he took out of his right trousers pocket? A. Yes, sir.

Q. What? A. Out of his right-hand pocket, just like this [illustrating].

Q. Yes; that would be the pocket that was farthest away from you, would it not, as you stood? A. That was the pocket that was farthest away from me; yes, sir.

Q. Yes, sir; in other words, the body of Mr. Jordan stood between you and his right pocket, practically? A. Yes, sir.

Q. What? A. Yes, sir.

Q. How—in what way did he bring his hand out of his pocket? A. Why, just about the same as any man would bring his hand out of his pocket. I do not know as there is any peculiar way that a man would bring his hand out of his pocket. I do not know as there is any peculiar way.

Q. Well, how far apart were they standing as they stood facing each other in that position? A. Oh, they were just as men ordinarily would stand, apart.

Q. About a foot apart? A. About a foot apart, I should judge; yes, sir—possibly a foot and a half.

Q. How—what kind of a coat did Emmons have on? A. I think Mr. Emmons had on a light coat that night; I cannot be positive.

Q. And Jordan put his right hand in his pocket and took out something, did he? A. Mr. Jordan put his hand in his right pocket and took out what I thought was a roll of bills.

Q. And before he took it out, what kind of a motion did he make with his hand that caused you to think he handed it to Emmons?

A. He passed it to Mr. Emmons and Mr. Emmons took it.

Q. With which hand did Mr. Emmons take it?

MR. CATOR: Now, Mr. McNab, do not indicate——

A. No; I do not know whether he took it with his right hand or with his left hand; I could not say, sir.

Q. You did not observe? A. No, sir.

Q. I wanted to anticipate—— A. (Interrupting.) Well, you would not think that he grabbed for it, would you? Yes, sir; one hand.

Q. Mr. McNab is mistaken about that matter of reaching both hands, you think? A. I did not say that he reached both hands.

Q. No; I know you did not; but you say you did not observe anything of that kind? A. No, I did not.

Q. You think he only took it in one hand? A. I am quite certain that he only took it in one hand.

Q. Are you quite certain about that? A. Which hand I do not know.

Q. Might he not have reached both hands for it. A. Hardly, if you had been there, you might.

Q. What? A. I say if you had been there, you might have reached both hands.

Q. Might be, of course? A. But you were not there.

Q. Lawyers, of course, can take money with both hands, if they can get it? A. Mr. Emmons was there.

Q. Now, but speaking seriously, it is your belief that—— A. It is a serious question.

Q. (Continuing.) That he only reached out one hand? A. I am of the opinion that he only took it with one hand.

MR. CATOR: Q. And you cannot say which? A. I cannot say which; no, sir.

Q. Can you say into what pocket he put it? A. I cannot; no, sir.

Q. Was it as dark that night as it was to-night, at the same hour? A. I should judge that there would not be much difference in the degree of light between that night and to-night.

Q. And these bills you had examined carefully, so that you knew of what they were composed? A. Yes, sir.

Q. Some were gold notes. A. Yes, sir.

Q. And some greenbacks? A. No, sir.

Q. All gold notes? A. No, sir.

Q. What? A. No, sir.

Q. No gold notes? A. Some gold certificates; yes, sir.

Q. Gold certificates? A. Yes, sir.

Q. What else? A. National bank currency.

Q. National bank paper? A. Yes sir.

Q. Now, were they new bills, all of them? A. No, sir.

Q. What? A. None of them were new bills.

Q. They were bills that had been in use, were they? A. Bills that had been in use.

Q. Fairly well worn? A. Fairly well worn.

Q. That is, they were what we would call not crisp? A. They were not crisp; none of them were crisp bills.

Q. None of the bills that you brought up? A. No, sir; there were none of them new bills.

Q. None of them new bills? A. No, sir.

Q. Now, the gold National bank bill is varying, is it not? A. Which? National bank notes?

Q. Yes, sir. A. No, they are about all the same, I think.

Q. Well, I mean as they get worn; their color slightly changes does it not? A. Well, yes, sir; slightly.

Q. And the bill is a little different color, is it not, from a new one? A. Oh, yes; certainly it is.

Q. And paper money sometimes fades, does it not, with time? A. Oh, sometimes it sweats.

Q. And gold notes are of a different color from National bank? A. Yes, sir.

Q. Now, when you saw him get this money, in what shape was it. A. It was in apparently the same roll that I gave it to him.

Q. Did you roll it up? A. I did; yes, sir.

Q. Did you put an elastic around the roll? A. No, sir; I did not; he asked for an elastic and we had none, so I just rolled it.

Q. He asked for elastics. A. Yes, sir.

Q. Did you have an idea that he expected to put elastics around them. A. No; because we had none. Mr. Jordan said: "I wish we had an elastic to put around this money and hold it in place."

Q. But you had rolled them up in rolls? A. I had rolled them up in rolls.

Q. That is, you say you had rolled them, as we would say, endwise or lengthwise? A. No; we just took them and rolled them right up.

Q. Have you any paper money by which you can give us an illustration? A. No; not fifty dollars.

Q. Well, I mean any paper money? A. I think I have got two fives here; yes, sir.

Q. Well, I would just like you to make an illustration with this as far as it would go.

(The witness had here produced two five-dollar bills and exhibited the same to Mr. Cator and others.)

THE WITNESS: The bills were rolled up like that [showing].

Q. They were rolled up like that when you handed them to him. A. Yes, sir; they were doubled up and then rolled.

Q. Yes, sir; and put in your pocket? A. One three hundred and fifty dollars was put in this pocket; three hundred and fifty dollars was put in this pocket; three hundred and fifty dollars put in that pocket, and three hundred and fifty dollars put in that side pocket.

Q. Now, will you please be kind enough to take these out and roll them up as you had them a moment ago? I just want to see them when they are rolled up. I shall not ask you to run the risk of letting me have them. A. No; no risk.

Q. Are there any marks on these? A. No; no marks on these.

Q. Now, you see that would buy two bottles of Mumm, and you only had one. A. And a good many drinks of whisky.

Q. Now, will you be kind enough to let the committee see that as it is rolled up?

(The witness here exhibited the bills to the committee, and explained.)

THE WITNESS: I took the bills like this; we doubled them up; there were only seven bills—and doubled them up over like that and rolled them up in this manner [showing].

Q. Now, a gold certificate is a different color from National bank money? A. Yes, sir. And all gold certificates are not the same color.

Q. Now, when this roll of bills was taken out, or whatever he handed to Emmons, were you able to see whether a gold certificate was on the outside, or whether it was National bank currency? A. No, sir.

Q. You could not tell that? A. No, sir.

Q. Or could you, when you saw the money delivered to Mr. Bunkers, or whatever was delivered—could you tell whether the bill on the outside was a gold certificate or a bank bill? A. No, sir; could not.

Q. Are you willing before this committee, knowing that it involves or may involve the liberty of one of these Senators, or of Senator Emmons—are you willing to take your oath and swear now, absolutely, without any regard to what you may have thought, or of any idea that you may have gained because this money had previously been given to Jordan—will you solemnly swear of your own knowledge, without any reservation whatever, that what he handed to Senator Emmons was money? A. Gentlemen, to the best of my knowledge and belief, that money that Mr. Jordan handed to Senator Emmons, and the money that Mr. Jordan handed to Mr. Bunkers, was the same roll of money, in appearance, that I gave Mr. Jordan in the room at 1116 Seventh street, that he put in his pocket and took out and gave to these men. That is to the best of my knowledge and belief, that it was the same roll of money that he put in his pocket and took out and gave to those gentlemen.

Q. That is to the best of your knowledge and belief? A. That is to the best of my knowledge and belief; yes, sir.

Q. And is that all that you will say? A. That is all that I will say; yes, sir.

Q. That is all that you will say as to him or as to Bunkers? A. Yes, sir; either as to him or as to Mr. Bunkers.

Q. Now, sir, where, when Mr. Bunkers and Mr. Jordan stood on Eighth street near this American Cash Store—where did you stand in reference to them at that time? A. Directly opposite.

Q. On Eighth street? A. On Eighth street, by Hanlon's saloon; yes, sir.

Q. Then in relation to the way they were standing, you stood just as you stood with reference to Jordan and Emmons—right across the street? A. About the same, yes, sir; about the same.

Q. Only it was Eighth street? A. Only it was Eighth street; yes, sir.

Q. Any telegraph pole near you there? A. No, sir.

Q. Did you stand so that if they had looked across the street, they could have seen you? A. Yes, sir.

Q. Did you observe either Bunkers or him look around to see if there were men near? A. No, sir, they did not look around to see.

Q. They did not look around? A. No, sir; they did not.

Q. If they had, they could have seen you, could they? A. Oh, there were people standing around; they could have seen a number of people if they had looked around.

Q. Now, when you were standing there and were watching Jordan, as you supposed, handing those bills to Bunkers, did you see Hartling at the same moment? A. I did not; no, sir.

Q. What? A. I did not; no, sir.

Q. Same situation in regard to your looking, or not looking, for Hartling existed then as when he paid the money to Emmons, did it? A. Yes, sir.

Q. You did not strive to see where he was? A. No, sir; I did not; I dismissed Mr. Hartling from my mind after I had left him and started in for to see the payment of the money by Mr. Jordan.

Q. Made no effort, by any glance of the eye, to see where Hartwell stood with reference to it, or observed?

THE CHAIRMAN: Hartling, you mean, Mr. Cator.

MR. CATOR: Hartling.

THE WITNESS: A. The only time that I saw Mr. Hartling was when Senator Emmons and another gentleman and Mr. Jordan passed up Eighth street to go into 1109.

Q. Now, where did Bunkers and Jordan stand, with reference to the edge of the sidewalk? A. They stood up nearer to the window.

Q. They stood up nearer to the window of the building? A. Nearer to the building; yes, sir.

Q. And how far off K street on Eighth street, about, were they? A. They were just a short distance.

Q. How many feet, should you say? A. Oh, I should judge not over ten or fifteen feet; you know how the window turns around there.

Q. Well, I do not. I do not live here. I have been a good deal here in past years, but not much in the last two or three years. A. Well, they were standing, Mr. Cator, just—you know there is a show window there that turns around from K to Eighth.

Q. Yes, sir. A. And it was up just near to the end of the window where they walked up.

Q. They stood up, pretty well up, against the building? A. Must

have been pretty close to the building. There was a peanut wagon—a little peanut stand, down on the sidewalk.

Q. Yes, sir. A. Just outside of that letter box there.

Q. Now were they standing in relation—was Jordan's back towards K street? A. Jordan's back—Mr. Bunkers, his back was faced down—and what is the next street to K?

Q. J, is it not? A. J.

Q. Yes, sir. A. Yes, sir. Well, first Mr. Bunkers' back faced that way, and Mr. Jordan's back faced K street [indicating]; that is approximately that was it.

Q. Yes, sir; that is right. And standing in that position, they stood with their—Jordan with his left side towards you and Bunkers with his right side towards you? A. No.

Q. What? A. No. Mr. Bunkers stood with his right side towards me.

Q. That is what I said. A. Yes, sir; and Mr. Jordan with his left.

Q. That is what I said; Jordan with his left, and Bunkers with his right towards you? A. Towards me; yes sir.

Q. And they were facing each other? A. Yes, sir.

Q. And about the same distance from each other, apart—standing face to face—that Emmons and Jordan had stood, eh? A. Well, you know how people would stand—

Q. (Interrupting.) Yes, sir. A. I should judge just about the same.

Q. A foot or foot and a half? A. Oh, I should judge Mr. Jordan and Mr. Bunkers were further apart than that.

Q. Now, which money—which pocket did Jordan take out that money or anything? A. Mr. Jordan took the money out of his inside coat pocket.

Q. Out of his coat? A. Yes, sir; out of his inside coat pocket.

Q. Did he take his hand first this way on his coat, or could you see? A. That I couldn't say; no, sir.

Q. What? A. That I could not say; no, sir.

Q. Could you see whether he took hold of the lapel that way, of the coat, or whether he put his hand in his pocket without taking hold of the lapel? A. I noticed him pull his hand out of his pocket.

Q. Out of which side? A. Out of—I think it was this side, sir [showing].

Q. Are you sure? A. Well, I am pretty positive; I wouldn't be—I wouldn't swear which side it was.

Q. That would be—just put your hand there again, please. That would be the side as he stood, that was next to the building, would it not? A. That would be the side that, as he stood next to the building.

Q. Yes, sir; so, that, on that occasion, his body would be between you and the pocket he put his hand into? A. Yes, sir; If that was the case.

Q. If that was the case? A. Yes, sir.

Q. It was the case? A. I say if that was the case.

Q. And he drew this hand out of his pocket, did he? A. Yes, sir.

Q. And you saw him hand something to Bunkers? A. I saw him hand, sir, to the best of my knowledge and belief, it was the same roll of bills that he put in that pocket.

Q. You had seen him put it in there? A. I had seen him put it in there; yes, sir.

Q. And is it not the fact that you had seen him put it in there, and

that you believed the money was there; does not that aid you and enter into your judgment in saying that to the best of your judgment or knowledge and belief, it was the same money? A. Not only that, but I say further that I knew the method by which he was going to make the payment.

Q. That is from what he told you he was going to do? A. That is from what he told me he was going to do; yes, sir.

Q. That entered into your judgment in making up your mind? A. Certainly it would.

Q. What? A. Certainly it would; but then I was watching for the delivery of it.

Q. But while you were watching for the delivery of this, knowing the fact that he put his hand in his pocket and took out and handed something to Emmons, the fact that he had told you that he was going to hand that to Emmons, and that you knew, and had seen him put money in there, was a part of the reason why you believed to the best of your knowledge and belief that it was those bills, was it not? A. And then seeing the roll itself, yes, sir; that entered in as part of it; yes, sir.

Q. Could you observe what was in his hand? A. A roll of some kind.

Q. A roll of some kind? A. Yes, sir.

Q. Could you tell from the color of it whether the outside of it was a gold note or a National bank bill? A. I think I have answered that.

Q. Well, I am speaking about Emmons? A. Well, you were speaking about Emmons, —

Q. (Interrupting.) Well, that is true, then, as to both cases? A. As to both cases; yes, sir.

Q. Well, with which hand did Mr. Bunkers take it? A. That I could not say. Mr. Bunkers was quite jubilant on receiving his money, and smiled quite broadly.

Q. He did? A. Yes, sir.

Q. But with which hand he took it you could not say? A. That I could not say; no sir. Just simply he seemed to receive it with considerable satisfaction.

Q. Well, I am more interested in knowing the way you saw his hands out than the smile on him. Of course a man may smile from any reason — A. Oh, yes.

Q. (Continuing.) Money is not the only thing on earth that makes a man smile? A. Oh, no, sir; no; there are other smiles.

Q. Possibly Jordan might have told him something that would make him smile, besides money. A. Possibly; yes, sir.

Q. Possibly he might have told him that he had ascertained that the Continental was going to pay that ten thousand dollars? A. Possibly, yes, sir; that would make almost anybody smile.

Q. Which pocket did Bunkers—can you testify what pocket he put that money in? A. No, sir; I can not.

Q. What? A. No, sir; I can not.

Q. Whether he put it in the coat pocket or trousers pocket? A. No, sir; I can not.

Q. Bunkers went away, did he? A. Mr. Bunkers and Mr. Jordan—

Q. (Interrupting.) —both went away together? A. Yes, sir.

Q. And how far did they go before Jordan returned to you? A. I think they walked about midway of the block on K street, toward Ninth.

Q. And then Jordan came back where you were? A. Mr. Jordan came back; yes, sir.

Q. What? A. Mr. Jordan came back; yes, sir. I had crossed over on the other side of K street and was standing there at the American Cash Store.

Q. When Jordan told you that he had given this money to Senators French and Wright, what did you say in regard to evidence? Did you charge him with breaking any promise to you? A. No, sir.

Q. What? A. No, sir.

Q. You did not? A. No, sir.

Q. Made no complaint to him that he had, by that method, deprived you of the evidence that you expected to and had been charged with obtaining? A. No, sir; I accepted his word for that, as I told him at the time.

Q. You considered that good evidence—his word? A. I had to accept it; I had none other.

Q. And you made no complaint whatever? A. What complaint?

Q. That you had no evidence, as you had in the other cases? A. After the commission of the act, there was no use to complain.

Q. Well, but you had not yet paid him his two hundred and fifty dollars, or any part thereof? A. No, sir; no, sir, I had not.

Q. What? A. I had not.

Q. And you in no way objected to carrying out the bargain and paying the two hundred and fifty dollars, because he had broken his promise with you as to those two other Senators? A. Well, I do not claim that he had broken his promise; he claimed that there was a misunderstanding in regard to the place and time of the appointment.

Q. But there was a distinct understanding between him and you that he should pay the money in such a way that you could observe it personally? A. There was; yes, sir. Now, here comes in—here comes in an element that we must consider again. He had already paid Senator Emmons and Senator Bunkers.

Q. Yes, sir. A. And he had proceeded to 817 Tenth street for to pay Senator French and Senator Wright. Now, those gentlemen came out; I was not there to see the transaction. Mr. Jordan then, according to the fulfillment of the contract that he had made with Mr. Bunkers and Mr.—and Senator Emmons, and had informed them that he stood ready to pay Mr. Wright and Mr. French, so he could do nothing else but pay the money there according to his own agreement; I should have been there—not up at the Golden Eagle Hotel.

Q. But he had agreed with you, had he not, that he would come to the Golden Eagle Hotel and let you know when and where he would let you see the money paid? A. Oh, well, that was my understanding; but when I met him at the Golden Eagle Hotel he told me that the appointment should have been—that he made the appointment out at the room, 817 Tenth street.

Q. Well, have you any doubt whether your understanding was right or not? A. I still think that he made the appointment at the Golden Eagle.

Q. Well, in a matter of that kind, is there any doubt in your mind as to whether you had an agreement with him, of that kind? A. In what respect?

Q. Why, that he should come there and get you, so that you could

see the money paid to Senators French and Wright? Were you at all in doubt as to whether he had that agreement with you? A. No. My inference was that he told me that he would meet me at the Golden Eagle Hotel.

Q. Your inference? A. Yes, sir. But he said—he said: “No; the appointment was at 817,” where I had had the previous appointment with him, earlier in the evening.

Q. Did you consider that you had any evidence at all in regard to the payment of the money to those two Senators? A. No, sir; no, sir; no, sir.

Q. What? A. No, sir.

Q. Do you so consider now? A. I so consider now. Only his word is all I have for the—that there was any money paid to those people.

Q. But you, however, paid him the two hundred and fifty dollars? A. Yes, sir.

Q. And made up your mind that you had done the best you could? A. Made up my mind that I had done the best that I could.

Q. Made up your mind that you had followed out the instructions that they sent you, and done the best you could? A. That I had used the best judgment I could in the matter; yes, sir.

Q. That was the best you could do? A. The best that I could do; yes, sir.

Q. Did you have anything communicated to you as to the purposes that were to be subserved ultimately by giving this money to these Senators? A. No, sir.

Q. You were never told anything about what the end, object or purpose was? A. No, sir.

Q. But you did know that, and inferred, in the natural course of things, it was expected that evidence should be given? A. I inferred.

Q. You inferred? A. Yes, sir.

Q. That you and Hartling would have to testify? A. Certainly, I did.

Q. Now, after you and Mr. Hartling met, after all this was over, did you have any conversation between yourselves as to the nature of the testimony that you had obtained or would be able to give? A. No, sir.

Q. What? A. No, sir.

Q. No conversation at all between you and Hartling on that subject? A. No, sir.

Q. Never has been since? A. I requested Mr. Hartling to sit down and write out a report of the facts as he construed them—as he found them, and give it to me. He done that.

Q. Did you ever write out a report? A. I did; yes, sir.

Q. Hartling handed his report to you, did he? A. He did; yes, sir.

Q. And did you hand in these written reports? A. I did; yes, sir.

Q. To whom? A. To Mr. Corbin.

MR. CATOR: Had Mr. Corbin gone home?

MR. McNAB: I think I have those, Mr. Cator.

MR. CATOR: I would like to see them, Mr. McNab, if you have them, if you are willing to—

MR. McNAB: Certainly, I shall furnish them with pleasure, if I have them. I think they are in my hotel.

MR. CATOR: Are they dated?

THE WITNESS: A. Mine is; I do not know whether Mr. Hartling's is or not.

Q. But Mr. Hartling's was made at least of equal date with yours, was it not? A. It was; yes sir.

Q. You had received his report when you made yours? A. No, sir.

Q. But you had it when you handed yours in? A. Yes, sir.

Q. So that it was made at the time. When did you hand the reports in? A. On the following day.

Q. Where were they written? A. In San Francisco.

Q. Were you called upon to have any conversation, after the handing in of the reports, with anybody? A. No, sir.

Q. What? A. No, sir.

Q. And you have not used these reports to refresh your memory in this matter at all? A. Have not seen them from that day to this; no, sir.

Q. What? A. Have not seen them from that day to this; no, sir.

Q. Did you attempt, by the use of your watch, to verify the time of these payments at all? A. I did; yes, sir.

Q. What? A. Yes, sir.

Q. Did you make any record or note of it? A. I made a note of the first payment.

Q. But not of the second? A. Not of the second.

Q. How did you make that note? A. In my room.

Q. Is it contained in your report, do you think, at the time? A. Yes, sir.

Q. What? A. Yes, sir.

Q. Did I understand you to say in your direct examination that you had ever known Jordan before that? A. Never met him before; no, sir.

Q. Never met him before; yes. Have you seen him since? A. Yes, sir.

Q. When? A. The afternoon that I came up from San Francisco.

Q. Did you have any conversation with him? A. No, sir.

Q. What? A. No, sir; his time was too occupied with Mr. Bunkers coming up.

Q. Yes, sir. Has there been any conversation with you since you have been here in regard to taking any steps to have Mr. Jordan arrested? A. Well, with the District Attorney; yes, sir.

Q. What? A. With the District Attorney; yes, sir.

Q. How came you to have that conversation with him? A. The conversation was in San Francisco, sir.

Q. Who first spoke to you on the subject? A. The District Attorney.

Q. At what place? A. The Mills Building.

Q. What? A. Mills Building.

Q. In whose office? A. In the office of Gavin McNab, attorney-at-law.

Q. Were you sent for? A. Yes, sir.

Q. And went to that office? A. Yes, sir.

Q. Who sent for you? A. I think that the District Attorney sent for me.

Q. Well, whom did you meet when you went there, besides the District Attorney? A. There was the District Attorney, the Sheriff, I think, or the Chief of Police—one, I don't know. There were two of the city officials of Sacramento.

Q. In San Francisco? A. In San Francisco.

Q. Well, did Mr. McNab say anything to you? A. No, sir.

Q. Introduce you to the District Attorney? A. Yes, sir.

Q. What? A. Yes, sir.

Q. And what—was any arrangement made in regard to the arrest of Mr. Jordan? A. No, sir.

Q. While you were in that office? A. No, sir.

Q. What? A. No, sir; no definite arrangements.

Q. What was said on that subject? A. That the District Attorney told me that he thought it was about time that he had taken part in this, and the only thing that he regretted that I had not conferred my information to him prior to this time, so that he could have taken steps himself.

Q. Was that when you—no one communicated to you by any method what the purpose or object of this matter was, did they? A. No, sir.

Q. What? A. No, sir; I inferred.

Q. You never knew that it was the purpose to expose this affair, until when? A. I did not know what it was for, sir.

Q. I say when did you first—the first that you ever heard that it was the purpose to expose this affair? A. To expose which affair?

Q. The giving of this money to these Senators. A. I don't just catch the meaning of that.

Q. I mean—you testified a little while ago that no one had told you anything about the purpose or object of this matter—of this transaction—what? A. Yes, sir.

Q. What? A. That is what I testified to.

Q. That is true, is it? A. Yes, sir; true.

Q. When did you first learn that there was any object or purpose to make an expose of it? A. When did I first learn that they was to make an expose of this here?

Q. Yes, sir; to cause it to be made public? A. Why, I presumed that that was what the information was gathered for—for the apprehension and conviction of the Senators who took the money.

Q. You supposed that when you gave the money? A. Why, as a rule, that is what you pay money for, under those conditions.

Q. But nobody had told you anything of that kind? A. Why, no sir; I shouldn't think that it would require anybody to tell you that.

Q. How is money usually paid for the purpose of exposing parties who take it—is it? A. Under conditions like that, why, certainly; yes, sir.

Q. Why, did you never hear of money being given to persons in an official capacity, for them to keep? A. As compensation; yes, sir.

Q. What? A. As compensation; yes, sir.

Q. No; as a bribe? A. Not as a bribe; no.

Q. Never heard of anything like that? A. Never heard of anything like that; no, sir.

Q. Then you did not believe, at the time this money was to be given, that it was to be given as a bribe? A. I knew it was to be given as a bribe.

Q. You knew that? A. Yes, sir.

Q. Well, did you not know that that was a felony—to give money as a bribe? A. I presumed it was; yes, sir.

Q. Well, if nobody had informed you, at the time you did this, that it was done for the purpose of exposing these Senators, how is it you were willing to engage in such a transaction? A. For the simple reason that I had the instructions.

Q. You thought the fact that you were instructed to do that a sufficient warrant for you to do anything of that kind? A. Yes, sir.

Q. You thought that the mere fact that somebody told you to take money and go and give it to these—to members of the Legislature, was sufficient warrant for you to do such things? A. I had my redress with the Legislature, sir.

Q. What? A. I had my redress with the Legislature, sir.

Q. I did not ask you that; I asked if you thought that was sufficient warrant to do it? A. The sufficient warrant was my redress with the Legislature.

Q. What do you mean by "redress?" A. Why, I might come before this Senate, and state to them what I had done.

Q. Well, at the time you did it, you did not know there was to be any attempt to expose them? A. Why, what else would it be for?

Q. Suppose that there had never been anything of this kind—no exposition of these men or of this matter, and they had kept this money, without anything being said, would you not have thought and felt that you had given them a bribe? A. I would have thought that they would have got off very easily.

Q. Would you have felt that you were giving them a bribe? A. What is the use of supposing? Let us get down to the facts. I gave them this money to entrap them.

Q. Well, then, a statement that you previously made to me, that you did not know what was to be the result of anything of this kind, was not a fact, was it? A. I did not make any statement like that; if I did I did not mean it.

Q. I asked you repeatedly if you had any idea yourself of what the purpose or the object of giving that money to these Senators was, and you said you did not. A. My answer to that was: "Why, it was obvious what it was for."

Q. What? A. My answer was, it was obvious what it was for.

Q. Well, you may have sometimes said that, but you certainly said at one time that you had no idea at all? A. Well, I never intended that.

Q. You never intended that? A. No, sir; I was fully aware of that.

Q. Then you desire to qualify that by saying that you did infer that this was for the purpose of entrapping— A. I was fully aware of that—what this payment was for.

Q. I thought, when you answered that, that it was strange that you did not say that you understood it was to entrap them. A. Oh, yes, sir.

Q. Mr. Tichenor, in your direct examination, there was a statement which I do not quite understand, and it is possible that you may be able to straighten it out. I understood you to say then when you went down to meet Mr. Russell that night at a late hour, that at Sixth and K streets you showed him all these bills; is that a misapprehension? A. Is that in my direct examination there? I don't think you will find it there, Mr. Cator.

MR. JACOBS: I believe you stated that at one time.

A. At no time; no, sir. You get my examination and see what I said with reference to meeting Mr. —

Q. I will read to you from the stenographer's notes. I do not wish, Mr. Tichenor, to put you or any other witness in the position of uttering what you did not, or to leave you as saying anything you do not wish to. It would appear that this is impossible: "I gave Mr. Jordan those

three fifty-dollar bills"—there that refers to the time you gave him three fifties after the work was over. "We then returned and came back again to the entrance of the Golden Eagle hotel," and I says: 'If you will wait, Mr. Jordan, for a few minutes, I will go and get that hundred dollars, and I will give it to you'"—— A. (Interrupting.) That refers to about 11:25; yes.

Q. (Continuing.) "He says: 'Meet me here some time after 12 o'clock'"——that means midnight? A. That means midnight.

Q. "I says: 'All right;' and boarded an electric car bound for the depot. I went down there and I met Mr. Russell, of the Continental Building and Loan Association, and from him I received an envelope marked 'X,' unopened, and the"—— A. (Interrupting.) "F"; that was marked "F"—that envelope.

THE CHAIRMAN: "F," unopened?

MR. CATOR: Well, it is immaterial; in the reporter's notes it looks like an "X."

Q. "I opened it up, and I found it contained a gold certificate for one hundred dollars," and so and so—"and showed this bill to the gentleman who was with me, and also showed him the bills on which I had put my mark at the time that I had cut the envelope open"——

WITNESS (Interrupting.) "Envelopes."

Q. "Envelopes," open? A. That is quite correct, sir; that statement.

Q. What bills did those refer to that you showed him after 12 o'clock that night? A. No bills at all; that does not say so, either.

Q. "And also showed him the bills on which I had put my mark at the time that I had cut the envelope open"—does not that refer to bills? A. That refers to bills; yes, sir.

Q. What bills? A. That was the fourteen hundred dollars that I had brought up with me from San Francisco on which the marks had been placed.

Q. We are now speaking of a time about 12 o'clock at night, after you claim this money had been paid. A. Oh, no; I did not, at all. You just—you have got the wrong interpretations, that is all.

Q. Right above there it says: "Meet me about 12 o'clock"—that is over there. You say that was midnight? A. It was over there; yes, sir.

Q. Now, this was Tuesday night, was it not? A. That was Tuesday night; yes, sir.

Q. Now, you say that this money had been paid to Emmons and Bunkers between 6 and 7, and between 10 and 11 o'clock to the others? A. Mr. Emmons was paid at 6:25; yes, sir.

Q. Now, what I do not understand is how, when you went down to see Russell and get the hundred dollars, about midnight of that Tuesday night, what did you mean by saying: "I showed this bill to the gentleman who was with me"—— A. (Interrupting.) Now, there—stop right there.

Q. Yes, sir. A. No, go ahead—what else did I do.

Q. "And also showed him the bills"—— A. (Interrupting.) I did not say when I showed him those bills, though, there. It is a misinterpretation on your part, though.

Q. You did not mean by that that you also showed him the bills at that time? A. No, sir; no, sir; it does not say so there.

Q. What you meant is that you had previously shown them to him.

A. That I had previously shown him the bills; yes, sir.

Q. All right that way? A. Yes, sir.

Q. With your explanation? A. Yes, sir.

Q. Because it would appear here, at the same time? A. That was the only time that I had made reference that I had shown him these bills.

Q. By that, you mean that you had previously shown the bills to Mr. Hartling? A. Yes, sir; that is what it means.

MR. McNAB: Mr. Cator, about those documents that you desired sent. Shall I send them to the committee to be used by you?

MR. CATOR: I do not know whether I want to use them or not.

MR. McNAB: Well, they would not be used in evidence, but I simply want to know where to leave them.

THE CHAIRMAN: If Mr. Cator desires to put them in evidence he may do so.

MR. CATOR: Well, that is the only way that they can be put in evidence, upon our request; because they would not be entitled to put them in evidence, of course.

THE CHAIRMAN: No, they would not.

MR. CATOR: When we call for a thing of that kind, we want to know what it is before we put it in evidence; the other side has the power, of course, over these papers.

MR. McNAB: We did not intend to put them in evidence; simply a paper; it is simply for your convenience; we want to be sure you will get them.

MR. CATOR: I would like to have you let us have them.

THE CHAIRMAN: Do you intend to place them in evidence with the committee?

MR. McNAB: No; I simply do this as a method of transit; that is all.

MR. CATOR: Will you let us have them?

MR. McNAB: On the understanding that you do not put them in evidence and the committee does not receive them as such, unless I see fit to put them in. I do not know whether they are in my office in San Francisco or here.

MR. CATOR: I think I do not wish to examine this gentleman any further. Mr. Alexander may desire to ask him something.

MR. ALEXANDER: You sent a telephone message, I believe, to Mr. Corbin, regarding which he has already testified. I want to get your testimony straight on that in my mind.

Q. You had a conversation with Mr. Jordan, did you not, regarding the delivery of this money? A. Yes, sir.

Q. And he stated to you that all the Senators, except Senator Emmons, would receive it personally from you, but that Senator Emmons would only take it if he got all of it, and would deliver it? A. No, sir; that was not—that was not the substance of that telephone message.

Q. That was not the substance? A. No, sir.

Q. You did not so telephone Mr. Corbin? A. No, sir; I did not.

Q. If he so stated, then he did not state the true facts? A. As I understood it.

Q. What was the statement? A. I stated that Mr. Jordan, when he met me at 5 o'clock, stated that all of the Senators—naming Senator French, Senator Bunkers, Senator Wright—would accept the money, but

that Senator Emmons would not accept the money only as coming from him.

Q. Well, now—— A. (Interrupting.) But Senator Emmons said that he would take all of the money, if I would give it to him, and distribute it to the Senators.

Q. Now, all of them would—do you mean by that that Senator Bunkers, and Senator French, and Senator Wright—— A. (Interrupting.) So Mr. Jordan informed me.

Q. Mr. Jordan informed you that those three gentlemen whom I have just named would accept the money? A. Would accept the money from me personally.

Q. But that Senator Emmons would not accept it unless he accepted it all. A. No, no; that Senator Emmons would accept it, but not from me; that he would take it from Mr. Jordan, or he would take all of the money and distribute it.

Q. Would take all from you personally? A. Oh, no; not all, but he would take all the money, and make the distribution himself.

Q. Yes, sir. A. But in no case would Senator Emmons accept the money from me.

Q. Yes, sir. A. He was a little bit leary.

MR. CATOR: Q. What time of the day was that? A. That, sir, was at 5 o'clock in the afternoon of the 24th.

MR. ALEXANDER: Q. Now, I wanted to ask you about the delivery of this money to Jordan. You said it took place at the house—— A. At 1116 Seventh street.

Q. 1116, in his own room there? A. In his own room; yes, sir.

Q. How did you have the money when you went into that? A. In bills.

Q. In bills, of course, but I mean in the original envelopes? A. No, sir.

Q. You had, then, already taken them out? A. Yes, sir.

Q. Were they—how did you have them—in different pockets, or what? A. No, sir; no. I will show you just how I had that money.

(The witness here produced from his pocket a small pocket or memorandum book, with which he subsequently illustrated his testimony.—Reporter.)

Q. Well, you had it in three separate compartments of that pocket book? A. No, I did not; I had the fourteen hundred dollars right in here, and I had the two hundred and fifty dollars for Mr. Jordan right in there. [Exhibiting.]

Q. You had the fourteen hundred—— A. (Interrupting.) I had the fourteen hundred dollars right in there. [Exhibiting.]

Q. And were the bills all laid down flat, and then folded into position? A. The bills were folded up.

MR. CATOR: I desire the committee to look—I intended to ask that. Will you please present that to the committee and show them where you had fourteen hundred dollars in that? A. Yes, sir—no; I had fourteen hundred dollars in that.

(The witness here approached the bar and exhibited the book for the examination of the members of the committee.)

MR. CATOR: Yes, sir. I ask the committee to observe the space and the kind of pocketbook and the size, that he could have that fourteen hundred dollars in, in judging how much space these bills, when put into four different packages, rolled up, would take.

THE WITNESS: And if you will give it to me, I will put in twice as much as that.

MR. CATOR: I understand that; I am not intimating that you did not have it there, or that you could not put in twice that much. The point is that I am showing, when these bills were rolled up, what a small space they would occupy, as bearing upon the question whether or not, when a man took it out of his pocket and handed it to another man, whether he could see it across the street; that is the point.

MR. ALEXANDER: Now, one moment:

Q. These bills were all together? A. All together; yes, sir.

Q. These fourteen hundred dollars were all together? A. All together; yes, sir.

Q. Now, they were counted out, I believe you stated, by yourself and by Mr. Jordan? A. No, sir.

Q. By whom? A. They were laid on the table, and Mr. Jordan counted them.

Q. Mr. Jordan counted them all? A. Mr. Jordan counted them.

Q. One after another, I suppose, and piled them up? One after another. No; he did not pile them up at all. Just laid there, and he run them over, I suppose, and counted the number that was there.

Q. Now, do you know what bills each of those Senators received? A. No, sir; I do not—wish I did.

Q. You do not? A. No, sir.

Q. Did you separate them into any special parcels? A. I did; yes, sir.

Q. In what manner? A. If the Senators have the envelopes there, I will show them.

(The witness here illustrated with envelopes which were in the possession of the members of the committee.)

A. The bills that were contained in that envelope were segregated and kept that way. The bills in that envelope the same way; the bills in this envelope, the same way, and the bills in that envelope.

Q. Now, can you tell the numbers that were on those bills? A. No, sir; not without referring to them.

Q. Did you refer to those envelopes—

A. (Interrupting.) Yes, sir.

Q. When you separated those bills? A. No, sir.

Q. Then how did you separate them? A. Why, I took the bills right out of this envelope here, and then I marked the last bill that I had there with the letter "F," and that was the mark for that; and then I took the next one.

MR. CATOR: Q. That is the manner in which they were separated into four piles when you handed to Jordan and he put it into four different pockets? A. Put it in four different pockets.

Q. That is the time when you took this envelope and handed to him? A. No.

Q. Well? A. Oh, no; when I took out that little pocketbook.

Q. When you handed to Jordan, you took out that little pocketbook.

A. When I handed to Jordan, I took out of that little pocketbook.

MR. CATOR: Have any of the committee a measure by which you could measure the length or breadth of that pocketbook?

THE WITNESS: I will leave you the pocketbook—it does not cost much.

Q. And also show what else you had in there—I mean as to space.

You also had something else? A. Oh, yes; I had something else—here.

Q. If you have no objection, I wish, for a little while, you would leave it empty with the committee, for I desire to refer to that; I consider it important.

THE WITNESS: There are some things here that I want to take out, though. I have got some receipts in here. There is a postage stamp—see? Now, you can have the pocketbook.

(The witness removed certain papers from the book, and left it with the committee.)

MR. ALEXANDER: Q. Did you see, on that occasion; or at any time that you were here, either Senator French or Senator Wright? A. I saw, during the afternoon, while I was up at the Golden Eagle Hotel—

THE CHAIRMAN: A little louder, please.

A. I saw, while I was up at—on K street, at the Golden Eagle Hotel, some time during the afternoon, a gentleman who I afterwards learned was Senator French, but I never—outside of that I have never seen Senator French until I saw him here. Senator Wright—

Q. You saw them no way in the business connected with this affair? A. No, sir; Senator Wright, I never did know him—well, I would not know him now, if I would see him.

MR. CATOR: That is all, Mr. Tichenor.

MR. JACOBS: Q. Just a moment. You have confidence in the honesty and integrity of Mr. Jordan, have you not? A. Well, I did have; yes, sir.

Q. Well, have you, now? A. Why, certainly I have.

Q. You believe him to be a truthful man, do you? A. I believe that he told me the truth when he gave me this evidence.

Q. And it was wholly on his statement to you that you included the names of Mr. French and Mr. Wright in your affidavit before this Senate? A. That I?

Q. Oh, no, that this—it was wholly upon your statement or report from you to Mr. Corbin that the names of Senators French and Wright were included in that affidavit? A. No; I do not think it was wholly upon that.

Q. Well, what was it based upon, if you know? A. Which?

Q. The names of Senators Wright and French in this affidavit? A. Why, Senators Wright and French, if you remember—I have not got all this evidence by heart, but you take nearly everybody who has testified here, they have brought in the names of Senators French and Wright as two of the Senators who were to be corrupted.

Q. Who were to be corrupted? A. Yes, sir; who expressed a willingness to be corrupted, then?

MR. ALEXANDER: Q. In what way? A. By the payment of money.

Q. About your employment with the Pullman Company—you say you were discharged? A. I said that I was discharged; yes, sir.

Q. And you say you do not know the cause of your dismissal from the— A. (Interrupting.) No, sir.

Q. You made no inquiry? A. No, sir. I think that you will find that it is one of the rules of the Pullman Company that they don't tell their employés what they are dismissed for.

MR. ALEXANDER: That is all.

MR. CATOR: That is all.

MR. DIGGS: Q. I believe you testified that when you delivered those bills to Mr. Jordan that they were each—each man's part was rolled

up in a small roll? A. Yes, sir; each part with this—the seven bills were separated and rolled up.

Q. Well, now when Mr. Jordon delivered those bills to the Senators, in what condition were they at that time? A. In the same roll—that is, those that were delivered to Senator Emmons and Senator Bunkers, I inferred, were in the same condition that I gave them to him.

Q. Were they still rolled up, or were they unrolled? A. The same roll, or another roll, rolled up; they were in a little roll.

Q. You do not know in what roll? A. Not in what roll; no, sir.

Q. Still, rolled up? A. Yes, sir.

MR. DIGGS: That is all.

THE CHAIRMAN: Have you seen any of the marked bills since they left your possession? A. No, sir.

Q. What was your object in marking the bills? A. Oh, I guess it is more habit than anything else.

Q. Of course, you do not know, absolutely, whether Mr. Jordan handed to these Senators the marked bills? A. To the best of my knowledge and belief, the same bills that I gave Mr. Jordan and he handed out—he handed out one to Senator Emmons and the other package to Senator Bunkers.

Q. And your only knowledge—all you know about money being received by Senators Wright and French, is what Mr. Jordan told you? A. Is what Mr. Jordan told me.

Q. That he made delivery? A. That he made delivery; yes, sir—that he made the delivery after they left the committee room at 817 Tenth street, and my inference for supposing that it was the truth, that he had been down there with me early in the evening to see the Senators, and I think they were either there in session, or—and that he had gone there after the committee meeting was over, and claimed that he had the appointment with me there, instead of up at the Golden Eagle Hotel, which looked feasible upon its face, and given them the money, and for that reason I accepted his version of the delivery.

MR. RALSTON: Q. Mr. Tichenor, have you heard of any recovery of any of these bills that were marked? A. It has been reported; that may be not true; that I do not know, sir.

Q. Then you yourself, of your own knowledge, do not know whether any of these marked bills have been recovered? A. I have never seen one of them, Senator.

Q. Or any of the numbers that are down here? A. No, sir; I haven't seen any of these bills.

Q. Well, do you know whether any of them have been recovered or not? A. Not to my knowledge; no, sir.

MR. DIGGS: One question—

MR. SIMPSON: Mr. Gould, will you identify these envelopes, so that they may be introduced? Mark them, so that they may be received in evidence?

MR. GOULD: Well, I think they have been identified by the letters upon the bills. I thought that would identify them. There are the letters from the bills, in each case.

THE WITNESS: All except—you can see this letter here; you see there is the letter there [showing].

MR. RALSTON: Did you put "M" on one, and "W" on another?

That "F" down below is the one that you put on that bill? A. That is the number that I put on that particular bill.

Q. That particular bill? A. That particular bill. You see this "N," I put on that particular bill—that "N" [showing] I put on that particular bill. That has no mark on [indicating]—neither one of these.

THE CHAIRMAN: And this key?

MR. RALSTON: Mr. Chairman, I move we adjourn until tomorrow evening at 8 o'clock.

MR. DIGGS: There is one other question I want to ask.

Q. How far were you from the Senators when Mr. Jordan delivered the money to them? A. I was just across the street at both instances; I do not know just the width of K street. At one time I was on K street and the other time on Eighth street.

Q. You stated these bills were simply rolled up? A. Were simply rolled up.

Q. When Mr. Jordan delivered them? A. Yes, sir.

Q. And could you, from the point you were at that time, see the bills, or see that they were bills? A. No, I could not; I told Mr. Cator that I could not testify that they were.

THE CHAIRMAN: Let us have quiet here.

THE WITNESS: That I could not testify whether they were greenbacks, gold notes, or national bank currency; but to the best of my knowledge and belief they were the same roll of bills that I had given to Mr. Jordan.

MR. DIGGS: Could you say you know that it was a roll of bills? A. It looked very much like it; yes, sir.

MR. DIGGS: That is all.

THE WITNESS: Just the best of my knowledge and belief is what I am swearing to in that particular instance.

MR. JACOBS: I would like to ask the witness: Q. Have you ever seen two parties, total strangers, standing about that distance away from you, passing an article about that size from one to the other, and could you identify the article that was being passed? A. Could you?

Q. I asked you if you could. A. No, sir.

Q. You could not? A. No, sir.

MR. GOULD: Q. That is, you mean to say you could not tell whether it was money or not? A. No, sir. What my inference was, though, that he having taken the money, and it was to all intents and purposes identical in appearance with the identical money that I had given to him, and from that I drew my inference.

MR. CATOR: Q. But if it had been two total strangers, and you had stood in that position, you would not be willing to swear absolutely that it was money? A. No, sir.

THE CHAIRMAN: Any other question? If not, the committee will stand adjourned until to-morrow evening at 8 o'clock.

FIFTH SESSION.

SENATE CHAMBER, THURSDAY, February 2, 1905, 8 P. M.

THE CHAIRMAN: The committee will come to order.

MR. CATOR: Mr. Chairman, at the session last evening I understood that the prosecution closed their case with the exception of offering a telegram, if they desired to, and we said we had no objection, and Mr. Copeland reserved the right to cross-examine Mr. Tichenor if he wishes, and I am informed by Mr. Copeland that he does not wish to examine him further, and we are willing to consider that matter concluded, as far as that is concerned. If the prosecution has closed—have you?

MR. GOULD: Yes, sir.

MR. CATOR: It was understood, also, and Mr. McNab stated that Mr. Corbin would appear here again if counsel desired to examine him, and if the committee would allow further examination. I will call a witness on behalf of the defendants in opening by the name of B. F. Littlejohn.

TESTIMONY OF B. F. LITTLEJOHN.

Sworn.

MR. CATOR: Q. Mr. Littlejohn, what is your full name? A. Benjamin Franklin Littlejohn.

Q. How old are you? A. I am 63 years of age, sir.

Q. Where do you reside at present? A. In Sacramento.

Q. How long have you resided here? A. Well, off and on, I have resided here probably eight or nine years.

Q. Do you know a man by the name of Henry Hartling? A. I do, sir.

Q. Did you ever reside at Downieville or Forest City? A. I resided at Forest City principally. I have been in Downieville, but not to make my home there.

Q. How far is Forest City to Downieville? A. To go by the trail I suppose it is 12 or 14 miles, but around the road it is about 20, as near as I can remember it.

Q. Did Henry Hartling reside at Forest City while you did? A. He did, sir.

Q. Did you know him there well? A. I was perfectly acquainted with him, sir.

Q. Do you know his reputation which he sustained in that community among the people in the community? A. Well, it was not very—

MR. GOULD (interrupting): Is the impeachment to be conducted upon legal lines?

MR. COPELAND: No, of course not.

MR. JACOBS: You have thrown down the bars.

MR. COPELAND: Had all kinds of testimony.

MR. CATOR: If you desire to object, we will hear what you have to say.

MR. GOULD: No; I do not desire.

MR. COPELAND: Conduct it just like you did.

MR. CATOR: Q. Do you know his reputation in that community for truth and honesty and integrity? A. I do, sir.

Q. Is it good or bad? A. Bad, sir.

Q. From what you know of it, would you believe him under oath?

A. I would not, sir.

MR. CATOR: Take the witness.

Cross-Examination.

MR. GOULD: Q. How long have you lived in Sacramento? I assume that the committee desires me to conduct the cross-examination.

THE CHAIRMAN: If you so desire.

MR. GOULD: Q. How long have you lived in Sacramento? A. Probably eight or nine years.

Q. What is your occupation? A. I am a miner by profession, but I find whatever work I can get to do—principally gardening.

Q. You are here a gardener? A. Yes, sir.

Q. And there a miner? A. Yes, sir; when I am in the mines I am a miner.

Q. How long since you lived in Forest Hill? A. Forest City?

Q. Forest City. A. I guess it is probably twelve or more years ago; I can't be positive, but I think it is about twelve years ago since I lived in Forest City.

Q. Twelve years or more? A. About that time; yes, sir.

Q. What year did you leave Forest City? A. Well, I left there in the eighties some time.

Q. Left Forest City some time in the eighties; when in the eighties? A. Well, I presume it was about 1885 along—would not be positive.

Q. And you left that county in that year? A. I would not be positive about that.

Q. About that year? A. Yes, sir.

Q. Where did you go? A. I went into Nevada—State of Nevada.

Q. Where in the State of Nevada? A. I was out in the White Horse Mining District.

Q. Then you went from Sierra County in 1885, as near as you remember, to the White Horse Mining District in Nevada? A. No, I came to Sacramento first, and then went to the State of Nevada.

Q. Have you ever lived in that county since that time? A. In Sierra County?

Q. Yes, sir. A. No, sir.

Q. Never lived in Sierra County since 1885? A. About that time.

Q. About that time? A. I am getting old, and I cannot remember dates very well.

Q. How old a man was Mr. Hartling at the time you knew him up there. A. I guess he was a man about 30, or somewhere along there; he was considered a young man.

Q. About 30 at the time you knew him up there? A. Yes, sir.

Q. Do you know what his occupation was? A. Yes, sir; township constable of Forest Township.

Q. An elective officer? A. An elective officer; yes, sir.

Q. Whom did you hear say that Mr. Hartling's reputation in 1885 in Forest City was bad? A. Well, from the fact that he was——

Q. (Interrupting.) Never mind the facts. Whom did you ever hear say that? A. I heard him impeached in the court-room of Downieville, Sierra County, for perjury.

Q. You heard somebody say that he told what was not true? A. No, I was sitting in the court-room myself.

Q. You heard somebody tell a contrary story from what he told? A. Judge Soward was judge, I think. He was impeached for murder on the stand.

Q. What do you mean by impeached? A. He swore to false evidence.

Q. He swore to something you did not believe to be the truth? A. I had nothing to do with the case. It was a case before the courts and not me.

Q. He was a witness? A. He was a witness; yes, sir.

Q. And he testified? A. He testified; yes, sir.

Q. And you do not think that he told the truth? A. I do not.

Q. That is all. A. C. W. Cross was the lawyer and Bert Schlesinger of San Francisco, and they impeached him for perjury.

Q. What do you mean by impeach? Tell me what was done. A. I will explain as near as I can. At the inquest, at the coroner's jury, he swore that the pistol he picked up laying alongside of the body of Frank Harlin, superintendent of Telegram (?) Mine, as near as I can remember—there was one barrel of that that had been discharged—he swore to that at the coroner's inquest, and subsequently Judge Davidson, who was the father-in-law of this superintendent, he engaged in the case as a kind of detective—bought him some way or another, I don't know how it was, and at the trial of B. Aroni—Bartholemew Aroni—he got up and swore that the chambers of the pistol had not been discharged, and Mr. Cross asked the question if he did not swear at the preliminary examination that the chamber of that gun was discharged, and he said he did, and he asked him why he had done it, and he said he done it to subserve the interest of justice. He says, "Do you consider telling a lie to subserve the interest of justice?" He says, "I do in some cases." He says, "When did you commence to tell the truth and leave off lying?" The counsel on the other side objected—prosecuting attorney—and he said he wanted to draw a demarcation between a lie and the truth, and he admitted he lied, and then he was asked: "So you admit you perjured yourself?" He says: "You can call it that way if you like," and Mr. Cross got up and asked for his impeachment of him, and as near as I can tell he was impeached.

Q. What do you mean by impeached. A. His evidence was impeached—he was thrown out of court.

Q. He was thrown out of court? A. Yes, sir.

Q. All you have stated is true? A. All I have stated is true; yes, sir. And he immediately left the county and went to San Francisco, and what he has done there I don't know; God knows; I don't know.

Q. Was the man who was on trial convicted or acquitted? A. He was sentenced to be hung. In the first trial he was convicted to be hung, and Bert Schlesinger got C. W. Cross to come up and defend this man, and he was acquitted.

Q. The first trial, at which Mr. Hartling testified, this man was convicted, was he not? A. Yes, sir; he was convicted.

Q. And Mr. Hartling was a witness for the prosecution, was he not?
A. For the prosecution; yes, sir.

MR. GOULD: That is all.

MR. CATOR: You say he was impeached. Were there witnesses called to swear they would not believe him under oath? A. I do not know that there were, but he admitted to the lawyer, Mr. Cross, that he perjured himself, and the question was asked whether he swore to a lie, and he said "Yes," and he says: "You consider it in the interest of justice to tell a lie?" and he says: "I do." And he says: "When did you commence to tell the truth and leave off lying?" He says: "I want to draw the demarcation between a lie and the truth," and the question was objected to, and the Court permitted the question, and he said he lied.

MR. GOULD: Q. Were you present in court? A. I was.

Q. Were you present at the coroner's inquest? A. I was not.

Q. Do you know that this witness testified at the coroner's inquest at all. A. Only by the evidence that was brought out before.

Q. Only by hearsay?

MR. COPELAND: You do not object to hearsay, do you, Mr. Gould?

MR. GOULD: Oh, no, not the slightest.

MR. COPELAND: Seems to be your favorite way of proving things.

MR. GOULD: Possibly that is true.

MR. GOULD: Q. You say you were not present at the coroner's inquest, and do not know of your own knowledge whether this witness testified at the coroner's inquest or not? A. No, sir; I do not.

Q. When was this? When did this occur? A. I could not exactly state; it is quite a number of years ago.

Q. About how many years; was it in 1885? A. Yes, sir; it was before I left the county.

Q. How long before you left the county? A. It was not very long—probably a year or so.

Q. Then, according to your best recollection, it was in 1883 or 1884? A. I won't state the date, because I cannot remember. I am getting pretty old, and I cannot remember dates, but I remember the facts.

Q. You say you remember the facts, but you do not remember the dates? A. I remember the facts perfectly well.

Q. You say Mr. Schlesinger— A. (Interrupting.) Bert Schlesinger was the lawyer for the defense, and also C. W. Cross of San Francisco.

MR. GOULD: That is all.

MR. CATOR: Q. Mr. Littlejohn, you say this man was tried first for murder? A. He was.

Q. Was Cross attorney on both occasions? A. No, sir; only on the last trial.

Q. Then Hartling swore at both trials? A. He swore at both trials; he was constable.

Q. And on the second trial Hartling swore also? A. Yes, sir.

Q. And it was then on the second trial that Cross examined him this way? A. It was, sir.

Q. On that trial the man was acquitted, was he? A. He was acquitted; yes, sir.

MR. CATOR: That is all.

MR. GOULD: Q. You are sure he was acquitted, are you? A. Well, I think he was.

Q. Are you willing to swear that he was acquitted? A. I am willing to swear that he was acquitted.

Q. You are willing to swear on your oath that that man on his second trial was acquitted? A. Well, he was running loose around the county.

Q. That is not the question. You are willing to swear on your oath that he was acquitted at the second trial, are you? A. That was the understanding.

Q. You are willing to swear under your oath this man was acquitted on his second trial? A. I cannot swear to anything.

Q. You cannot swear to anything? A. As regards the trial.

Q. You do not know whether he was acquitted or not? A. I do know he was acquitted.

Q. Then you swear before this committee he was acquitted? A. I will.

Q. On the second trial? A. Yes, sir.

Q. On the first trial he was sentenced to be hung? A. He was convicted on the first trial.

Q. And sentenced to be hung? A. Yes, sir.

Q. He got a new trial? A. Yes, sir.

Q. And on the second trial he was acquitted? A. Yes, sir.

MR. CATOR: Q. Were you present at the second trial? A. I was.

Q. Were you there when the verdict was brought in? A. I was.

Q. Did you hear the verdict read? A. I heard the foreman deliver the verdict.

Q. And you saw him after that? A. Saw him frequently after that.

MR. GOULD: Q. What was the man's name? A. Bartholmew Aroni—an Italian.

Q. You are sure that the jury convicted him on the first trial, are you? A. Yes, sir.

Q. Do you swear to that as positively as to the other? A. Yes, sir; because he was tried the second time.

Q. Then I understand you swear positively that upon the first trial Bartholmew Aroni was convicted of murder in the first degree, and sentenced to be hung? A. Yes, sir; as near as I remember.

Q. Is that true? A. Yes, sir.

Q. You swear to that? A. Yes, sir; he was convicted.

Q. And you swear that on the second trial you were present in court and heard the jury render a verdict of not guilty? A. I was a witness to the—

Q. (Interrupting.) Will you answer that question? A. Yes, sir; he was acquitted.

MR. RALSTON: Q. Where do you reside in Sacramento? A. 931 M street, corner of Tenth.

Q. 931 M street? A. Yes, sir.

MR. SIMPSON: Q. Did any personal difference ever exist between you and Mr. Hartling? A. Not at all, sir.

Q. No trouble ever existed between you in any way? A. No, sir; I was well acquainted with his father, and they were my friends, and I never had any personal difficulty or any trouble whatever.

MR. CATOR: Mr. Chairman, and the Committee—When the prosecution closed last evening late at night, after midnight, it had been going on for two days, and no amount of testimony in may judgement has ever been taken before a jury or in court in volume larger than that. No exceptions were taken on either side. Counsel were worn out, and had

but little sleep at night, and I for one went to bed as soon as I could, and this morning, as soon as we were able to find each other we appointed a meeting for this afternoon to consult in regard to the line of defense which would be deemed best preliminarily, and after consultation, it resulted in our organizing, and appointing a chairman and secretary, and considering as best we could what evidence we desire especially for the purpose of impeaching those who have been brought here to swear away the liberties and practically the life of these Senators, and the other side has proceeded with a degree of secrecy altogether unusual even in criminal cases. In criminal indictments the names of the witnesses are put on the indictment, and the accused knows of them before hand. We never had the slightest knowledge of who was to be produced here, until these detectives who have sworn in this matter appeared, and it was impossible for us until we attempted to communicate with the outside world, and they had stated where they lived, and so forth, to attempt to gather any idea as to what witnesses, and from what places we could secure them, or could secure evidence to show that they were not worthy of credit, and have the evidence bearing upon our defense.

This afternoon, with as much rapidity as possible, we made out a list of such witnesses from the best information we could obtain, which poured in upon us from various quarters, and the list of witnesses was made out at 2 o'clock—a portion of them—and brought to the chairman of the committee, and he signed a subpoena which has not been issued, and the date has not been filled in, because I spoke to him about making a return day for it, and the chairman could not make a return day until he consulted with the Sergeant-at-Arms to ascertain how soon he expected to serve the witnesses. The Sergeant-at-Arms being then busy, I could not wait longer, and the Chairman had to go to a meeting of the Finance Committee. For that reason it became impossible this afternoon to issue those subpoenas, and this evening, as a consequence of my representations to the chairman of the committee, there has been a conversation between the chairman and the other members of the committee and some of the counsel in regard to this matter in which some question of the number of witnesses to be produced and the places from which they may come, has been gone into. We desire to proceed with as much speed as possible, but it is not our fault that we have been confronted with witnesses who have lived in places from which we must procure evidence in regard to their character. When a man comes before this committee and swears to things that have been sworn to here, who has spent his life or a portion of it in the capacity of a private detective, we are obliged to do what is universally done: to resort to places where he has lived to ascertain his character in the place where he was born, and we can not with safety undertake to ignore or leave that class of evidence without being produced.

We have our subpoenas here, and are ready and were ready this afternoon to have them signed. Another thing is in regard to the number of witnesses. We have of course a right, we think, to subpoena the number of witnesses whom we think will best subserve our purpose. The charges made are very grave and involve very great possibilities, and we desire, as I say, to proceed with the greatest speed, and after these subpoenas are signed and served we will be ready to proceed just as soon as the witnesses can possibly be brought here. I have no knowledge of how it could be done sooner. The situation here is not different

from what it is anywhere. Men who are charged with murder—the most heinous crimes in court—are always given an opportunity to prepare for their defense.

If it were not for the fact that we were up to the last moment kept in the dark—assumed names of witnesses been used and *nom de plumes* to the last moment—we might have prepared something beforehand; but as it is, we have prepared this at the very earliest possible moment, and we have been unable to produce other witnesses here. This is the capital of the State, and I am not acquainted in this community. It may be that it is a fact that there are other men in this community who may impeach these witnesses, but I do not know them, and my clients do not, and we can only take those witnesses whose names are telegraphed to us or sent to us from other places. We have acted in the best of faith in the list of witnesses from different places. Some of them in one place are more important than those we can obtain from another.

We think we are entitled to produce evidence here to break down absolutely the case which has been presented by these detectives, and we will ask the Chairman to sign the subpoenas and fix a return day for them at the earliest moment that the committee thinks the witnesses can arrive from the places where they live, or some of them, and we will be prepared to proceed just as soon as a witness can be got here and examined.

MR. SIMPSON: Have you any witnesses in Sacramento at the present time that you can put on?

MR. CATOR: Not a single one. This witness is the only one that I know of here in Sacramento, and he was drawn to my attention after I came into the chamber this evening.

MR. SIMPSON: All your witnesses are away from Sacramento?

MR. CATOR: Yes, sir.

MR. SIMPSON: Got to be subpoenaed from outside places?

MR. CATOR: Yes, sir. Neither Mr. Tichenor nor Hartling have ever lived in Sacramento, and it would be but an accident if we found persons in Sacramento who had lived in places where they were known. It is a well-known rule that we must produce witnesses who have lived in communities where they have resided, and know their reputation there.

MR. SIMPSON: Is there any testimony except as to character that you desire to put on now?

MR. CATOR: None that we can produce at this time.

THE CHAIRMAN: Did you look into the matter as to whether we can telegraph these subpoenas or not?

MR. CATOR: I did examine the Code on that subject, with other counsel, and Section 301-305 of the Political Code provides the method of producing evidence before the Senate Committee, and it is exclusive in its provisions, and provides that it may be served by any person who could be a witness, and that his return is evidence thereof. I am satisfied that no other method of service would compel the witnesses to attend. As all these witnesses are out of the county, nothing but the power of the Senate can compel their attendance here.

THE CHAIRMAN: That would preclude telegraphing the subpoenas.

MR. CATOR: I am of the opinion that in this inquiry that a telegraphic subpoena is excluded, and in my judgment if it were otherwise it would delay and make this manner more ineffective.

THE CHAIRMAN: Of course, Mr. Cator, it is the desire of the com-

mittee that you shall have opportunity of putting on all the witnesses that you desire in this case.

MR. CATOR: I want to say one word, Mr. Chairman, in that respect. It is possible, and we shall endeavor that if the witnesses we want to bring here—that fewer of them will do; we will content ourselves with a lesser number, so as not to take time, but all lawyers know and everybody who has had experience in courts of justice knows that, called on as we are suddenly, people coming to us and telling us that so and so will testify so and so, we must discount that to some extent, and we must subpoena some men who, when they arrive here they will not be the witnesses that we supposed them to be. Therefore, the committee is not to assume that all the witnesses we subpoena will necessarily be called. In good faith we would call them, if they could testify, but we would not waste the time of the committee with every witness who is not right up to the mark, and it will then be for the committee at any time to place a limitation on them by saying you have heard evidence enough on a single point.

THE CHAIRMAN: You understand that the work of this committee is delaying a great deal the business of the Senate of this State, and we desire to get through with this matter as soon as possible, although we do not wish to put one straw in the way of giving you an opportunity to present your case just as you desire to have it presented. That is the wish of the committee in this matter. We want you to be as expeditious as you can, and we want to give you every latitude, and believe that you will be sincere.

MR. CATOR: The desire of the committee and counsel is entirely mutual. As far as I am concerned I came here to attend an Elections Committee meeting which was held last night at 7 o'clock. I never had the slightest dream of being where I am to-day, but when this thing was sprung I expressed my sympathy for a Senator I have long known, and offered him my services, and it has since happened that I have taken a larger part than I expected, and I only desire to say that my own services are very much needed elsewhere, and my own business absolutely requires that if I shall continue in this case at all, that it shall be brought to a close at the earliest possible moment.

THE CHAIRMAN: Have you any idea when you can get your witnesses here, and when you would be able to proceed?

MR. CATOR: Some witnesses are to be subpoenaed from San Francisco; the main ones from Bakersfield; some from Downieville, which we believe will be of the greatest importance, and some from Los Angeles, that we think we cannot afford to do without, because of the character of the men that knew this man under important circumstances for a long time elsewhere, but who now happen, unfortunately for us, to live that distance from us. However, it is less than twenty-four hours by rail, and they are compelled to come under your subpoena immediately. Other witnesses we will be able to take up as soon as they arrive here.

THE CHAIRMAN: To what time would you suggest that this be adjourned to when we adjourn to-night?

MR. CATOR: Of course, it is not for me to suggest, but inasmuch as the Chairman has asked me to suggest I will say that the witnesses from Downieville, of course, cannot arrive here very soon. I understand that it is not altogether on the line of rail; am I right in that respect?

THE CHAIRMAN: That is true.

MR. CATOR: Witnesses from Bakersfield ought to be gotten here by Saturday night, possibly. I do not know whether they could, but it is for the committee to determine. As far as I am concerned, and I think I speak for the rest of associate counsel here, we are ready to go on Saturday night till midnight, and if it is thought lawful, on Sunday, without holidays or anything else. We desire no extension of time whatever except to the very earliest moment that our witnesses can be got here, and we have used every effort to try to make out a list of witnesses at the earliest possible moment that we could be informed whom we ought to subpoena, but the general consensus of opinion among counsel here is that altogether the matter would be expedited if we did not attempt to go on until Monday—that we would be absolutely sure of witnesses then.

THE CHAIRMAN: You have a list of the witnesses that you desire to have subpoenaed?

MR. CATOR: My associate counsel has them in his pocket, I believe; they are made out in bulk. Whether there be a sufficient number of other blank subpoenas, we will use what there are, and the Sergeant-at-Arms will have to make the best efforts he can to copy, if he has not copies enough.

MR. SIMPSON: The attitude of this committee towards this investigation as far, so has been one of inactivity as to the conduct of either side of the case, but I believe that there is more involved in this investigation than the mere presentation by counsel of Mr. Corbin of the facts constituting the prosecution; and the presentation of the defense by the gentleman representing the Senators in the manner and according to the testimony of the witnesses whom they may choose to select or call. I believe that in the interest of this investigation, that this committee, before it is over, insist upon the attendance here and the testimony of everybody in any way connected with it, whether called by the prosecution or the defense so-called, and I believe that the testimony of Mr. Jordan should be taken here, and that his attendance should be secured and his testimony obtained for the benefit of this investigation; also, the testimony of any other man who has been connected with it in any way. I believe that if a continuance is granted here at this time, if Mr. Cator has any witnesses who are available here to-night, that he should either present them to-night or not call them, as far as he is concerned. The nature of this investigation is such that, consistent with the business of the Legislature, it must be speedily concluded, and to that extent it is more or less of a summary proceeding. For that reason the time that is usually accorded in a court of justice where an investigation is held in a matter as serious as this, cannot be given by this committee.

THE CHAIRMAN: Do you desire to make any motion?

MR. GOULD: I would like to suggest to the committee, if you will permit me, that so far as the attitude of Mr. Corbin and his council is concerned, it is not the attitude of a prosecutor. Mr. Corbin and his witnesses came here in response to the subpoena, and to sustain the allegations of the affidavit read in defense of Mr. Corbin on the charge of contempt of the action of a committee of the State Senate. We have come here merely for the purpose of presenting to this committee the testimony upon which that affidavit was drawn, and upon which the belief was formed in the minds of those who represented Mr. Corbin, of

the truth. In so far as the further prosecution of the case is concerned, if it might be so called, further than that we have no desire to take, except in this: In reference to the witnesses that have been presented here in the sustaining of that affidavit, of course we desire, if their character is attacked, that they should have a fair opportunity to defend themselves in the same manner that their character is assailed. It is doubtless true that in every community can be found those who will assail the character of almost any one who is engaged particularly in such work as constables or the work of detectives, and it is doubtless true that statements may be made by people who are prejudiced or misinformed that would seriously detract from their good character before this Senate, their character not being known. As I understand, the gentlemen who are defending the Senators charged here, it is their desire to bring from abroad witnesses here to assail the character of Mr. Tichenor and Mr. Hartling. Should that be the case, it of course would be incumbent upon those who present it here, and it would be incumbent upon the Senators themselves, this committee—if it be merely testimony assailing the character in a general way—to determine whether it is general in the community, which could only be done by bringing those who are selected not only for the sole purpose of assailing the character, but by bringing those who might be presumed to have a fair and an even and a just impression of the character of the individuals in the community in which they lived whose reputation is assailed. I would therefore make this suggestion at this time—and I do not know whether it will meet with the agreement of the committee or the consent of council who are representing the defense—and that is, if they will state—they need not state here to the committee—if they will state to me what they expect to prove by these witnesses, whether it is a general lack of good repute or specific acts, then it will be very convenient to send for the witnesses, if there be such, who can present what these witnesses of whom I speak conceive to be the truth in regard to that matter. It would thus save much time of the committee, making but one mission of the Sergeant-at-Arms in serving these subpoenas, answering for both the assailing witnesses and the defending witnesses.

MR. COPELAND: Mr. Chairman, Mr. Gould's suggestion is a very good suggestion in one way. It is very good for the prosecution. In conversation this evening with the chairman of the committee, I was so unfortunate as to be misunderstood about a matter, and I wish to say here that in my conduct before this committee I have attempted to observe the utmost respect. We are here, gentlemen of the committee, representing men who have not caused this committee to be here, who have not brought these charges, who are engaged in performing or were engaged in performing their duties as Senators, when, without reason, so far as they are concerned, without any notice, without any warning, a man arises before the bar of that Senate and reads an affidavit—for what purpose—for the purpose of besmirching one committee of this Senate, so that he could protect the nefarious practices of his clients. Now they come here before this committee, and they ask this committee to deny us practically the rights which the Constitution gives us to the process of this Senate for every witness which we desire which can be placed upon the stand to show that these men who have been placed upon this stand, including Mr. Corbin, are unworthy of belief.

MR. GOULD: I ask leave to correct the gentleman. The statement he makes is entirely inaccurate.

MR. COPELAND: It is the truth. We desire to have this investigation closed as soon as it is possible to be closed in justice to our clients. We have nothing to fear. Before this investigation is through we will make it so plain that this is a conspiracy directed to this committee for the very purpose of contaminating this Legislature, to the end that these nefarious practices can be carried on by these corporations, that even those who to-day are believing that these Senators may be guilty, will admit they are not. How are we going to do this? Gentlemen of the committee, all we ask is for this committee to grant to us the privileges that are guaranteed to us by the Constitution, and we pledge here in this public place that no favors will be asked of us, that we will go through with this investigation if it is continued until Monday night, and I think it will be a saving of time, and we will go on night after night and day after day if it takes twenty-four hours. We will ask no further continuance, and any one who insinuates, any one who seeks to have this committee believe that we want to string out this investigation, they are mistaken. We want only to have our witnesses here. We only want what every man is entitled to—a fair trial here in the presence of our peers. The best organizer in this State has organized this plot. We know nothing of it. All we ask is for this continuance, so that we can come here prepared to meet him, and we will meet him.

MR. GOULD: It is hardly necessary for me to state that counsel has most absurdly misconceived the statement I made, either intentionally or unintentionally. He does not understand what I said at all. I intended to ask, if I have made myself clear to the committee—I intended to ask that at the same time the subpoenas were sent out for witnesses for the defense, that the people who stood sponsor for the character of these two men might be given an opportunity also to send for witnesses to defend their character. Do you understand that, Mr. Copeland?

MR. COPELAND: I do, Mr. Gould.

MR. GOULD: I am very glad that you do.

MR. COPELAND: That is very fair. The impression Mr. Gould made on me was this: That he had an object, and that was to appall the committee with the fact that when we sent for witnesses at Bakersfield, they must send too, to rebut ours; but I will say to Mr. Gould and this committee, that when we have our witnesses here that they will be of such a character that it will be impossible for him or any other man to bring any man from that city to say that they are not all right. We will have such men as Mr. Chanslor. We will have men who are all citizens of southern California and Downieville, and who are in business, and there will be no doubt about that.

MR. GOULD: I understand what you are talking about.

MR. COPELAND: Yes; I thought you would when I got through.

MR. GOULD: Those people include those oil operators on Section 16. Tichenor was after them and detected them.

MR. COPELAND: He did not detect them. He lied about it—and we will prove it—just the same as he lied here.

THE CHAIRMAN: Mr. Copeland, do you think it is fair and right that if witnesses are brought here to testify as to the bad character of the

witnesses who have been on the stand—you believe it would be perfectly fair to the other side to bring witnesses to testify to their good character?

MR. COPELAND: Certainly, Mr. Chairman. I am satisfied, if they can find any; I doubt it.

THE CHAIRMAN: I think the idea as brought out by Mr. Gould might expedite matters, in this regard. That if witnesses were brought here from Downieville or Bakersfield or San Francisco to impeach the witness, then Mr. Gould could ask for certain other gentlemen to be subpoenaed to come here and testify in the opposite direction, and then there would be another delay of the committee, and subpoenas would have to be issued and served, and it would take four or five days to go to Downieville again and get back again, and I think the suggestion of Mr. Gould is eminently a proper one. If you are going to get witnesses to impeach their witnesses, it seems to me it is fair to have at the same time subpoenas issued so that the Sergeant-at-Arms can take their subpoenas with yours.

MR. COPELAND: I think that is fair. I do not think they can find any.

THE CHAIRMAN: I am not arguing this thing at all.

MR. GOULD: If we had those greenbacks we would find them.

MR. CATOR: That is what we expect them to do. I understood the suggestion of Mr. Gould to be this: That if we furnish him with the nature of the evidence that our witnesses intended to give, he would subpoena his witnesses. I am willing to meet Mr. Gould after the adjournment and extend to him every possible courtesy in that respect that can be extended with safety or propriety, subserving the interests of the accused. He has had notice in this matter. There is a well-known formula: "Do you know such a man? How long have you known him? Do you know him in the community in which he resides? Do you know his general reputation in that community for truth, honesty, and integrity? Is it good or bad? And if he says it is bad, from what you have heard, would you believe him under oath?" That is the end of it except for cross-examination. Mr. Gould is notified that those are the kind of witnesses which we intend to subpoena. He is not entitled to their names. He intends to call other witnesses, that they would believe these men under oath. He has notice, and he is at liberty to make out subpoenas for any one he wishes, and bring them here at the same time. That is perfectly proper, and no one on my side has objected to it. I say so far as meeting him, and telling him the nature of our evidence, he knows as a lawyer that that is the formula of law, and that is what he has to make, and if he wishes to counteract it, and he can find men who would believe them under oath, and will say that their reputation is good in the community, he can do so.

MR. GOULD: Is that all?

MR. CATOR: That is not all.

MR. SIMPSON: I have a suggestion. You state that as a matter of law the knowledge of the witness must be in the community in which he lives?

MR. COPELAND: Or has been.

MR. GOULD: If the matter is to be presented in that fashion, I think in so far as the testimony in reference to reputation is concerned, that there ought to be applied the strict legal rules, because if that is not the case, the examination on this branch of the case would be well-nigh interminable. Who could follow up every idle story or statement of fact from a biased view that would be made—possibly by a perjured

witness on the stand. The reason that examinations of that character are governed by the strict rules of law is because they wander off into collateral matters, the truth of which it is absolutely impossible to determine. If it be the understanding of the committee and of counsel that so far as character is concerned, the investigation be confined within strict legal lines, as I think is the only practical way with this character of testimony, there will be no difficulty whatever.

MR. COPELAND: We will agree to that, Mr. Gould.

MR. GOULD: We cannot agree. The committee will have to agree on that.

THE CHAIRMAN: That is just the way the thing struck me. I am not a lawyer, and I do not know that I am sorry, but it struck me that if the committee wanted to be fair in this matter, that if they allowed witnesses to be brought to say that witnesses who had testified were of bad character, then it would be fair to allow the other side to bring witnesses who would say that they were of good character, and it struck me that way, not knowing anything about the rules of evidence as laid down by the courts relative to this branch of law.

MR. SIMPSON: And the Code, Mr. Chairman, which you have to make?

THE CHAIRMAN: And the Code. It seems to me, as a layman, that this here would be interminable, and I have suggested to my colleagues—I know that most of this committee is composed of men who are not lawyers—that possibly anyone who would know anything about it on the committee, as to the strict rules which should govern this branch of the law is the distinguished member from Alameda, in whom we have the greatest confidence, of course. It is not the intention, as I said before, to limit this investigation in any degree. We want the fullest investigation. We have been liberal, and have allowed all sorts of things to be asked on cross-examination, and questions asked, that I, as a layman knew could not be asked in a court of justice. We are not sitting as a court, but merely by order of the Senate to investigate these charges. We may make a recommendation to the Senate. The Senate is the jury, and the Senate will act upon it, and they may entirely ignore our recommendation. Our recommendation may not have any particular weight with them, because I see that many of the Senators are here listening to this investigation themselves, and I judge from that that they don't care to take much of a chance with this committee, but they want to advise themselves by hearing the testimony themselves; but I do not blame them much either particularly, and it is the desire of the committee to get through with this thing as soon as possible, and if the counsel can get together and outline some sort of policy so that they may assure this committee that the thing will be proceeded with as expeditiously as possible, I think that that will satisfy the committee, and I think that the committee are inclined to adjourn until Monday night at eight o'clock, if we may have this Senate Chamber. I do not know whether the Senate will desire to proceed with the evening sessions by next Monday night. I am not advised in regard to that, but as I said before, this investigation is delaying very much the business of this Senate, and we want to get through with it as soon as possible. I think I voice the sentiment of this committee on that subject.

MR. SIMPSON: Mr. Cator, have you any idea of the witnesses you want on this subject?

MR. CATOR: We have the names that we agreed on to-day that we desire to be subpœnaed. Whether when they all get here they will all give testimony, I do not know.

MR. SIMPSON: I mean subpœnaed?

MR. CATOR: Yes, sir.

MR. RALSTON: How many?

MR. CATOR: I should think about forty. That seems like a great number, but all the witnesses we have summonsd can be examined in one-half of the time that it took to examine the witnesses on the other side. These witnesses can be examined, in my judgment, at the rate of about eight per hour.

MR. COPELAND: We will be through by a week from to-night.

MR. GOULD: There is one question I wanted to ask, and that was whether it was finally determined by the committee whether the strict rules of evidence would be applied on this impeachment matter?

THE CHAIRMAN: We are just having our lawyer settle that.

MR. CATOR: I do not think I will determine that until the witnesses come.

(Here the committee deliberated privately for a few minutes.)

THE CHAIRMAN: Mr. Simpson.

MR. SIMPSON: Mr. Chairman, in view of the fact that evidence on the matter of character does not bear directly upon the issues before this committee, unless it is in some way regulated in this investigation—would possibly lead to great prolongation in the investigation of this committee—I would move you that in the production and examination of witnesses called for that purpose that the committee be governed by the rules of evidence.

THE CHAIRMAN: Is there a second to that motion?

MR. RALSTON: Second the motion.

MR. CATOR: Does that refer to evidence in regard to impeachment?

MR. SIMPSON: Yes, sir.

MR. CATOR: Simply to impeaching evidence?

THE CHAIRMAN: Simply to impeaching evidence.

MR. GOULD: Do I understand that the rules of evidence as laid down by the committee applies also to the introduction of evidence as to specific instances?

MR. SIMPSON: In every way.

(Motion carried.)

THE CHAIRMAN: Now the counsel understand what the committee has determined on relative to that kind of evidence, and they will govern themselves accordingly.

MR. CATOR: By the rules of evidence I suppose is meant the rules followed in the courts of California?

THE CHAIRMAN: Yes, sir.

MR. JACOBS: I presume, inasmuch as the committee has departed from the rules of evidence in taking the testimony of the prosecution in this matter, that if the attorneys for the defense found later that it became necessary, or that the defense would be benefited, or that facts could be better presented to this committee by rescinding the rule that the committee has just passed, that such a rescission would be made upon the request by the attorneys for the defense for a specific order?

THE CHAIRMAN: Of course the committee can change the rule at any time. This is a Senate committee.

MR. CATOR: I understand the rule applies only to impeaching evidence.

THE CHAIRMAN: That is, it is made for the purpose of limiting that kind of evidence, and not making it interminable. That is the reason for adopting the rule.

MR. RALSTON: I move that this committee do now adjourn, to meet in the Senate Chamber on the 6th of February, 1905, at 8 P. M.

MR. CATOR: Before you adjourn, Mr. Chairman, I would like to know at what hour you intend to place in these subpoenas as the return hour for the witnesses—8 o'clock Monday evening?

THE CHAIRMAN: Eight o'clock Monday evening. If counsel will remain here after we adjourn, and will hand in the names of those you desire to have subpoenaed, we will make out the subpoenas.

MR. CATOR: Subpoenas are all made out, as far as we are concerned, in bulk.

THE CHAIRMAN: And we will start the Sergeant-at-Arms immediately.

MR. RALSTON: Would there be any possibility of our going on with any other witnesses, so that we could continue this matter to-morrow night with some other kind of investigation, so that we would not be delayed entirely until Monday evening?

THE CHAIRMAN: It seems that we have allowed those who brought the charges to present their case, as they saw fit, and we ought to allow the defense the same privilege. That is the way it seems to me, and I do not think we ought to go on an investigation on our own hook until we are through with those gentlemen. After they have finished on that, then this committee has the privilege, of course, of going on further if they so desire.

MR. CATOR: If we do not call all the witnesses that the committee thinks ought to be examined, it is the duty of the committee to institute any inquiry they may see fit on its own motion, but having adopted a rule that these gentlemen proceed as prosecutors, and having allowed those presenting the charges to proceed continuously, I think that now we should be permitted to put in our case until we conclude.

THE CHAIRMAN: That is my view of it.

MR. CATOR: And then the committee can subpoena anybody it thinks it ought to subpoena.

THE CHAIRMAN: Do you desire to have Mr. Corbin here?

MR. COPELAND: On Monday night.

THE CHAIRMAN: Monday night?

MR. COPELAND: Yes, sir. I want to cross-examine Mr. Corbin Monday night.

THE CHAIRMAN: Will you endeavor, Mr. Gould, to have Mr. Corbin here Monday night?

MR. GOULD: Yes, sir; if his health is such as permits.

THE CHAIRMAN: If his health permits you will have him here?

MR. GOULD: Yes, sir.

THE CHAIRMAN: You will not require another subpoena?

MR. GOULD: No, sir.

MR. RALSTON: Will Mr. McNab be here Monday, too?

MR. GOULD: I hope so.

MR. RALSTON: I move that we now adjourn until Monday evening, February 6, 1905, at 8 o'clock P. M.

(Motion seconded and carried, and an adjournment taken, to meet in the Senate Chamber on Monday, February 6, 1905, at 8 P. M.)

SIXTH SESSION.

SENATE CHAMBER, MONDAY, February 6, 1905, 8 P. M.

THE CHAIRMAN: The committee will please come to order.

MR. SIMPSON: Mr. Chairman, before the defense puts on any witnesses, I would suggest that Senator Welch, whose name has been mentioned in connection with the testimony in this matter, be invited to make any statement that he wishes before the committee. I believe Senator Welch is present.

THE CHAIRMAN: Is Senator Welch present?

MR. WELCH: Yes, sir.

THE CHAIRMAN: Do you desire to make any statement before the committee, Senator?

MR. WELCH: Yes, sir.

TESTIMONY OF R. J. WELCH.

Sworn.

MR. SIMPSON: Q. Senator, in the testimony of two of the witnesses—at least two of the witnesses that were called here before the committee—it was mentioned that they met you on Seventh street? A. Eighth street.

Q. On Eighth street? A. Yes, sir.

Q. Will you state to the committee what you recollect about the circumstances? A. The testimony of the two detectives as to my meeting Mr. Joseph Jordan and Senator Emmons on the corner of Eighth and K street is perfectly correct. That part of it is, but my meeting those men was referred to in one of the San Francisco morning papers in a way that was entirely misleading. The paper stated that I was seen in that vicinity with Mr. Martin Kelly and one or more of the accused Senators, which is not a fact, and will not be testified to, and has not been, by the detectives, and cannot be by either the accused or Mr. Kelly. I have no recollection of meeting Mr. Kelly before meeting the Senators or after—that is, not the Senators, but Senator Emmons and Mr. Jordan—and my meeting the two gentlemen, which, by the way, I have no apology to make for, happened in this way: I left my quarters, room 411 K street, about 6 o'clock in the evening, and proceeded to a club that I belong to that is located at 1109 K street.

MR. SIMPSON: Q. At what time was that, Senator? A. I left home about 6 o'clock, and I should judge I was at Eighth and K about ten minutes after 6 or a quarter after, and had dinner there about half-past 6, and on the corner of K and Tenth—Tenth and K—I met or was intercepted by Senator Emmons and Joe Jordan, and Joe Jordan asked me if I was going down to the club to dinner, and I told him I was, and

he informed me that it was a little early, and with that he turned around to Senator Emmons and asked him if he would not go down and he would show him the club. Mr. Jordan was or is a member of the club. Senator Emmons walked down to the club with Jordan and myself, and Jordan went to the club with Senator Emmons and came out. I don't think they were in the house over three minutes. I went out on the sidewalk with them and they went around K street. I was very hungry and I went and had my dinner.

Q. Did you leave the club when they left? A. I left and went out on the street.

Q. How far up on Eighth street did you go from the club towards K? A. The club is only about fifty or sixty feet from Eighth street.

THE CHAIRMAN: Q. Did you go up as far as Eighth Street? A. I did not.

MR. SIMPSON: Q. Do you know where Senator Emmons went after he left the club? A. I have no idea. He and Mr. Jordan left me outside of the door.

Q. Do you know whether Senator Emmons and Mr. Jordan left together? A. They left me together.

MR. SIMPSON: That is all.

MR. SIMPSON: Is Mr. Jordan present.

MR. C. T. JONES: If the committee please, I appear for Mr. Jordan as his attorney. He is here under these circumstances: He was subpoenaed by the committee, and he is here in obedience to that subpoena, and he is represented by Mr. Hiram Johnson and myself. Mr. Johnson was unable to come up to-night, and I ask the committee to postpone the hearing of Jordan's testimony until to-morrow evening.

MR. SIMPSON: Mr. Chairman, I would suggest that inasmuch as there are many witnesses present from outside points, who no doubt desire to get away as soon as possible, and inasmuch as the testimony of Mr. Jordan may take up an entire evening, that we postpone the examination of that witness for one session, at least, of this committee. You say that Mr. Johnson will be here to-morrow?

MR. JONES: Yes, sir, and Mr. Jordan will obey the orders of this committee and be here whenever you desire him.

THE CHAIRMAN: I think it might be well to postpone the examination of Mr. Jordan until we get through with all of these witnesses who have been brought from a distance. Is there any objection on the part of the committee?

THE COMMITTEEMEN: None whatever.

THE CHAIRMAN: If there is no objection, such will be the order, and Mr. Jordan will hold himself in readiness to answer the summons of the committee at any time.

MR. JONES: He will not be needed to-night?

THE CHAIRMAN: No, not to-night.

MR. JONES: That will be satisfactory.

THE CHAIRMAN: Mr. Jordan will please report here to-morrow night at 8 o'clock.

MR. SIMPSON: Mr. Cator, about how many witnesses have you here this evening?

MR. CATOR: I cannot say how many have reported. The number that I have conversed with is not large, but there are a good many here that I have not personally met. I have got witnesses enough, I guess,

to keep going until 3 or 4 o'clock, if you desire to continue the session that long.

MR. SIMPSON: I would suggest or move that Mr. Cator be invited to proceed with his witnesses on the matter of character, but I want to say that personally, I reserve at this time the right, if I conceive it necessary, to move later on to limit the number of character witnesses to a fixed number on each side.

THE CHAIRMAN: There will be no objection to proceeding now with them?

THE COMMITTEEMEN: No objection.

THE CHAIRMAN: Call your witness.

TESTIMONY OF H. P. DOVER.

Sworn.

MR. CATOR: Q. Where do you reside? A. Bakersfield, Kern County.

Q. How long have you resided there? A. I have resided there since 1873.

Q. Your occupation. A. Miner.

Q. Did you know Henry Hartlin or Hartling while he was there? A. Yes, sir; I did.

Q. That was between what years? A. I think it was in 1881 or '82 or '83.

Q. '91, was it not? A. 1891.

Q. 1891 to 1894, about? A. Yes, sir; between those years.

Q. Do you know his general reputation among the people, from what you have heard, as to his character for truth and veracity, honesty——

A. Yes, sir.

Q. ——integrity. Is it good or bad? A. Bad.

Q. From what you know of it, would you believe him under oath?

MR. GOULD: That is, I suppose, not one of the questions that is permitted under the legal rules of testimony.

MR. SIMPSON: Do you object to it?

MR. GOULD: I object to it on that ground.

MR. CATOR: I cite three cases from the Supreme Court of this State, in which it is said it is always allowable. In the case of *Stevens vs. Irwin*, 12 Cal. 306, that was the only question before the court.

MR. NICOL: We deny that authority and ask for the production of the report.

MR. GOULD: Have you the report here?

MR. SIMPSON: Mr. Chairman, I find that under the case of *Stevens*, cited by counsel, and also *Wise against Wakefield*, reported in 108th California, that the question is a proper one. I would suggest to the committee that the objection be overruled.

MR. CATOR: There is another in 121st California to the same effect. Will you please answer the question? A. What was the question?

MR. CATOR: Read the question.

(Question read.)

THE WITNESS: I would not.

MR. CATOR: That is all.

Cross-Examination.

MR. McNAB: Q. You were a settler on what is known as the swamp lands of Kern County at that time, were you not? A. I was.

Q. And there was a controversy in existence at that time between the Kern County Land Company and the Kern settlers, was there not? A. At that time, I think it was, Carr & Haggin, known as—something.

Q. Whatever it was, the predecessors of the Kern County Land Company—Carr & Haggin, was it not? A. Yes, sir.

Q. Mr. Hartling represented these people, did he not, in that district, and in that controversy? A. Well, it proved at that time to be that way.

Q. He was representing them in procuring the evidence on which the cases were subsequently tried, was he not? A. No, sir; not that I know of.

Q. He was there examining into the various locations, was he not? A. He was there as a spy amongst us people, picking up what moves we were going to make.

Q. The result of it subsequently was that the Kern County Land Company, or the successors of Haggin & Carr, obtained the land, did they not? A. Claimed it.

Q. Obtained it? A. They claimed it. No; they did not obtain it at that time.

Q. But later they obtained it, did they not? A. Yes, sir; they did.

Q. And you people lost the land, did you not? A. We did.

MR. McNAB: That is all.

MR. CATOR: That is all.

TESTIMONY OF CHARLES P. FOX.

Sworn.

MR. CATOR: Q. Where do you reside? A. Bakersfield.

Q. And what is your occupation? A. Secretary of the Board of Trade of Kern County.

Q. Did you know Henry Hartling between the years 1891 and 1894, or of him? A. I knew of him in 1895.

Q. Do you know his general reputation there for truth and veracity and integrity and honesty? A. Yes, sir.

Q. Is it good or bad? A. Bad.

Q. From what you know of him, would you believe him under oath? A. No, sir.

MR. CATOR: Take the witness.

Cross-Examination.

MR. McNAB: Q. You were one of the settlers in the swamp lands of Kern County at that time, were you not, Mr. Fox? A. No, sir.

Q. What were you doing in the county at that time? A. I was justice of the peace.

Q. Where? A. In Bakersfield.

Q. In the town of Bakersfield? A. Yes, sir.

Q. What do you know of Mr. Hartling at that time, or what did you know at that time? A. I only knew, of course, what was the general report in the county at that time.

Q. Was it not largely the report of these swamp settlers that had difficulties that arose through the Kern County Land Company, or at that time Haggin & Tevis, with the swamp settlers? A. It was, altogether, yes—those reports originated altogether out of the conflict—

Q. (Interrupting.) Out of that? A. Yes, sir.

Q. Mr. Hartling was representing Haggin & Tevis in that matter with the swamp settlers? A. My recollection of the report at that time is this: That Hartling was representing the interests of Carr & Haggin, and was acting as a spy or traitor in the camp of the swamp settlers.

Q. He was acting as a detective, was he not, for Haggin & Tevis? A. Yes, sir.

Q. And subsequently the swampers lost the land, did they not? A. They compromised.

Q. Haggin & Tevis obtained the land, did they not? A. They did; yes, it was—

Q. (Interrupting.) They obtained the land? A. Yes, sir; they obtained the land.

Q. And your sole knowledge of Mr. Hartling's reputation arose out of his detective service in that transaction, did it not? A. Yes, sir.

MR. McNAB: That is all.

MR. CATOR: That is all.

TESTIMONY OF B. L. BRUNDAGE.

Sworn.

MR. CATOR: Q. Where do you reside? A. Bakersfield.

Q. How long? A. Thirty-four years.

Q. What is your occupation? A. Farmer.

Q. Do you occupy any public position? A. Assessor of Bakersfield.

Q. Did you know of Henry Hartling from 1891 to 1894, by hearing anything of him from those who lived there? A. By reputation.

Q. Do you know his general reputation there for truth and veracity, honesty and integrity? A. It is not good.

Q. Do you know what it is? A. It is bad.

Q. From what you know of it, would you believe him under oath? A. I hardly think so.

MR. CATOR: That is all.

Cross-Examination.

MR. McNAB: Q. Mr. Brundage, is not your knowledge of Henry Hartling confined to the controversy between the Haggin & Tevis land people and the swamp settlers; it was at that time he was there? A. Yes, sir.

Q. And his operations in your county were on behalf of Haggin & Tevis as a detective in the controversy over the swamp land, was it not? A. It subsequently came to public notice that it was.

Q. You did not know it until it did become public, did you? A. No, sir; I did not.

Q. And you did not know anything about Henry Hartling to his detriment, until it became known he had been a detective there in that controversy, did you? A. I had not known him before.

Q. And you knew nothing about him except in connection with that controversy, did you? A. That was all.

Q. During the three years that he lived there, prior to the development of the fact that he was a detective engaged for those people in this land controversy, you did not know anything about him, did you? A. I knew that he was a settler—supposed to be a settler on the swamp.

Q. But you did not know anything to his merit or detriment during that time? A. Not at that time; no sir.

Q. So that your knowledge of Henry Hartling is based on the developments of that controversy in which he acted professionally for Haggin & Tevis, is it not? A. It is.

Q. And your idea of his reputation was based solely on that controversy, was it not, and what grew out of it? A. Yes, sir; his methods.

Q. Your ideas were simply on the method of obtaining the evidence, were they not? A. Yes, sir; I did not think it was right.

Q. You did not think his methods of obtaining evidence were right? A. No, sir.

Q. Acting as a detective among the settlers; is that not correct? A. He was not supposed to be a detective.

Q. I know he was not. He did not advertise he was a detective; is not that correct? A. No, sir; he did not.

Q. And he obtained the information, as he was a detective, without it being known that he was such; is not that correct? A. Please state that question again.

Q. Your belief in the inveracity and the lack of integrity of Henry Hartling is based on your knowledge that he was a detective and secretly performed these services for the land company? A. No. I think it was in betraying the confidence of the men whom he pretended to be friends to.

Q. He was there as a detective, was he not? A. It afterwards developed so; yes, sir.

Q. And the fact that he acted there as a detective in that controversy was the cause, and the sole cause, of your opinion, was it not? A. No, sir; it was not.

Q. On account of the methods that he used to obtain that information—that is the basis of your opinion, is it not? A. I do not like a sneak, Mr. McNab.

Q. You state that truly, but I am asking you—

MR. COPELAND: Q. What did you say, Mr. Witness? A. I say I do not like a man that will use sneaking methods.

Q. You do not like a sneak—was not that what you said? A. Yes, sir.

MR. McNAB: Q. Is the fact that you do not like a sneak in the form of a detective, your basis for the opinion you express here? A. Yes, sir.

Q. And you have not any other knowledge of Mr. Hartling, other than his professional transactions there, have you? A. I know of nothing of him since.

MR. CATOR: Q. In this general repute, was it proved that he had gone there and pretended to take up a claim without letting the people know that he was a detective? A. Yes, sir.

Q. And that he gained secrets for the purpose of testifying for this land company by getting into their confidence, without their knowing it? A. Yes, sir, that was the general belief at that time.

Q. And betraying them? A. Yes, sir.

MR. GOULD: Q. In other words, he was not a detective with a brass band?

MR. COPELAND: He was a detective with a ranch?

TESTIMONY OF T. H. FOGARTY.

Sworn.

MR. CATOR: Q. Mr. Fogarty, where do you reside? A. Bakersfield.

Q. How long? A. Five years.

Q. What is your occupation? A. Hotelkeeper.

Q. Of what hotel? A. One of the proprietors of the Arlington Hotel.

Q. And did you know of Henry Hartling between 1891 and 1894 there, or do you know? A. 1891 and 1894?

Q. Do you know and have you heard of his general reputation? A. (Interrupting): I have heard of the general reputation of Mr. Hartling since I have been in the hotel; yes, sir.

Q. Do you know his general reputation in that community for truth and honesty, veracity and integrity? A. Well, yes, sir; I do.

Q. What is it—good or bad? A. Very bad, from what I could understand, sir.

Q. From what you know of that, would you believe him under oath? A. No; I don't think I would.

MR. CATOR: Take the witness.

Cross-Examination.

MR. McNAB: Q. How long have you been there, Mr. Fogarty? A. Five years, sir.

Q. That is, what year? A. From 1900 to the present time.

Q. When, do you know, was Mr. Hartling there; do you remember? A. Well, I do not know of his being there only from what I hear, sir.

Q. Did you ever hear—

MR. CATOR (Interrupting): Would you just allow me one question? I wish to ask this witness about Mr. Tichenor, and then you can cross-examine.

MR. COPELAND: Hitch them up.

MR. CATOR: Q. Did you know the general reputation in that community of the truth and veracity, honesty and integrity, of Mr. Tichenor?

A. Yes, sir.

Q. Is that good or bad? A. Very bad, sir.

Q. From what you know of it, would you believe him under oath? A. No, sir.

MR. CATOR: Go ahead.

MR. McNAB: We will take up one at a time.

MR. COPELAND: It happened together; they belong together.

MR. McNAB: Q. You never met Mr. Hartling, did you? A. No, sir.

Q. You were not in Bakersfield at the time he lived there or near there; were you? A. I was there from 1900 to the present time, sir.

Q. Did you know that the controversy in which Mr. Hartling appeared was a contest between the Kern Land Company and its predecessors over the swamp lands of Kern County? A. Oh, I have heard it talked about since.

Q. Were not the remarks made about Mr. Hartling in connection with that controversy, always? A. Well, I heard that Mr. Hartling——

Q. (Interrupting.) Answer my question, please. A. I am going to answer it to the best of my ability. I heard that Mr. Hartling was there, and took up a homestead claim as a settler and acted as a spy for Carr & Haggin; that is what I heard, sir.

Q. That is the sum total of your knowledge of Mr. Hartling, is it not, even by hearsay? A. That is all; I heard it talked about in the lobby of the hotel at different times from different people.

Q. And that is the sole basis for your opinion as to his lack of truthfulness; is that so? A. Yes, sir; I heard it from a good many of all those people, whose word I would believe, and naturally would form an opinion that way.

Q. The statements were made in connection with that controversy, were they not? A. No; they were all in connection with Mr. Hartling.

Q. I mean Mr. Hartling's connection with that controversy? A. Not necessarily so in regard to that controversy, but in regard to him, as to his character and veracity.

Q. It was based entirely on these transactions of the Kern Land Company and the swampers, was it not, when he was acting as a detective? A. Well, I do not know what he was doing, and I do not know what they named what he was doing, any more than he was down in that community, in that place, at that time.

Q. As a detective? A. They did not say that, sir. I could not say that as a settler, and took up a homestead.

Q. Representing Haggin & Tevis? A. No, sir; I did not understand it that way; I understood them to say he was there and acted as a spy.

Q. Is there any difference between a spy and a detective in your mind? A. I am not competent to answer that question; it is hard to say; I don't know.

Q. It was based on these transactions, these various conversations you have had? A. Based on what transactions?

Q. Based on these transactions in which you say he acted as a spy. A. That seemed to be the opinion of the people whom he was there for, and the company he was there for, I don't know.

Q. Mr. Tichenor was connected with that great oil controversy of recent years in Kern County, where the shooting took place? A. I heard he was.

Q. You heard he was. And that is the total of the conversation you heard about him in connection with that? A. Yes, sir.

Q. And he was a detective in that transaction, was he not? A. I could not say what he was, really.

Q. Well, did not the conversation that you had, or heard, referring to Mr. Tichenor, grow out of that oil controversy in which a number of the leading people of Bakersfield were interested, and in which several people were shot. A. Yes, he was mentioned in that connection. Is that what you mean?

Q. He was acting as a detective, was he not? A. I could not say that at all; I did not look at it that way.

Q. All you heard in reference to Mr. Tichenor was in regard to that piece of litigation in which a number of people were arrested and several men shot; is that not correct? A. Well, I heard the same sort of a conversation in regard to Mr. Tichenor as I did the other party I was just speaking about, and I presume it necessarily bordered on that oil

proposition you speak of, but what capacity he was acting in I could not say; but the consensus of opinion seemed to be against him and his methods of doing business.

MR. McNAB: That is all.

MR. CATOR: Q. This consensus of opinion that you speak of, and the persons from whom you gained this knowledge as to his reputation, was not gained from the settlers? A. What settlers?

Q. It was not the settlers in that swamp land only that spoke against him? A. I don't know but very few of those people. I am speaking of the people that I had in my hotel business—people that happened to be around there, and I heard the conversations, and I got interested in it—public opinion around there.

Q. And people in general? A. People in general.

MR. McNAB: Q. And you do not know whether the people in general happened to have interests in those swamp lands or not? A. No, I could not say that.

Q. So you do not know whether these were the people who suffered through his efforts or not? A. I could not say that.

Q. When you speak of public opinion— A. (Interrupting.) People I meet.

Q. You do not know whether these people suffered in consequence of his action or not, do you? A. No, sir; I do not know anything about that.

MR. COPELAND: Q. In all the conversations you heard about these two men, both Mr. Hartling and Mr. Tichenor, did you ever hear any one say they were honorable and reputable citizens?

MR. McNAB: That is objected to.

THE WITNESS: Am I through?

THE CHAIRMAN: You are through.

MR. COPELAND: We are through. If they don't want it, we have to submit.

TESTIMONY OF MYRON HOLMES.

Sworn.

MR. CATOR: Q. Where do you reside? A. At Bakersfield, in Kern County.

Q. How long have you resided there? A. About fourteen years.

Q. What is your occupation? A. I am a clerk with the Kern County Land Company.

Q. Do you know the general reputation of Henry Hartling for truth, veracity, and integrity in that community? A. Yes, sir; I do.

Q. Is it good or bad? A. It is bad.

Q. Do you know that it is? A. I have heard it is bad.

Q. And from what you have heard of it, would you believe him under oath? A. I would not.

MR. CATOR: Take the witness.

Cross-Examination.

MR. McNAB: Q. You do not know Mr. Hartling? A. No, sir.

Q. Did you ever see him? A. Yes, sir.

Q. When? To-night? A. The first time I ever remember of seeing him; yes, sir.

Q. When did you go to Bakersfield? A. Fourteen years ago in March—it will be in March.

Q. You knew that he had a controversy, and that he represented

Haggin & Tevis in the swamp land claims, or the claims against the swamp land settlers of Kern County, did you not? A. No, sir; I knew nothing about it.

Q. You did not know that? A. No, sir.

Q. You knew that Haggin & Tevis had a controversy with the swamp land settlers, did you not? A. I heard something about it at the time; yes, sir.

Q. Did you know that Haggin & Tevis subsequently became possessed of that land, and the swamp land settlers departed from it. You did, did you not? A. Some of them did, I think; yes, sir.

Q. You know that that created a great deal of controversy did you not? A. Yes, sir; I think there was at the time.

Q. Do you know as a fact that the business of Mr. Hartling in Bakersfield was confined to his transaction in regard to these swamp land settlers on behalf of Haggin & Tevis? A. I do not know as I know anything about it.

Q. Did you not hear that he had been connected with them? A. Yes.

Q. Did you not hear that he had been a detective in that matter? A. Well, yes; I did hear it.

Q. And you heard him largely criticised for his detective services or spying, as you call it? A. No, not largely.

Q. Well, you heard that he had participated in that transaction did you not? A. Yes, sir.

Q. And did you hear him criticised severely for doing so? A. Yes, sir; I heard him criticised.

Q. You heard him criticised severely for the methods he adopted as a detective, did you not, in that transaction? A. No.

Q. Did you not hear that he spied on these settlers? A. Well, I don't know—if you let me express it in my own way, the way I heard it, I can tell you how I heard it.

MR. COPELAND: Mr. McNab, let the witness tell in his own way.

MR. McNAB: He can tell after I get through.

MR. COPELAND: Very well.

MR. McNAB: Q. Do you not know as a fact that Mr. Hartling never had any business transaction in Kern County excepting this that he had for Haggin & Tevis in relation to the swamp land transactions? A. No, sir; I do not know.

Q. You don't know. A. No, sir.

Q. Then you don't know whether the talk that you heard originated out of that transaction or not? A. No.

Q. And you don't know the man at all? A. Well, I will tell you how I heard the transaction about that land business—what I heard about this land transaction.

Q. Well, you say it grew out of your transaction, all you heard. A. Yes sir.

Q. That is all I want to know. That is all.

TESTIMONY OF JAMES W. JAMESON.

Sworn.

MR. CATOR: Q. Mr. Jameson you reside where? A. At Tehachapi, Kern County.

Q. Are you well acquainted in Bakersfield and that community? A. Pretty well acquainted; yes, sir.

Q. What is your occupation? A. Manufacturer of lime.

Q. Have you heard the general reputation of Henry Hartling discussed in that community. A. I never have; no, sir.

Q. Do you know what his general reputation there is for truth and veracity, honesty and integrity? A. No, sir.

Q. You do not know? A. No.

Q. I don't mean from your own knowledge, but from what you heard other people say? A. I never heard it discussed until to-day.

Q. Until to-day? A. No.

Q. Never heard it discussed down there? A. No, sir.

Q. Have you ever heard the general reputation of Mr. Tichenor discussed? A. Yes, sir.

Q. Can you state what his general reputation is for truth and veracity and integrity? A. It is not good.

Q. From what you know of it would you believe it under oath? A. No, sir.

MR. CATOR: Take the witness.

Cross-Examination.

MR. GOULD: Q. Did you know Mr. Tichenor while he was there? A. I knew him by sight and reputation.

Q. How long was he there? A. Why I think he was there four or five months, more or less. Four or five months.

Q. Do you know what case he was engaged on while he was there? A. Well, he was supposed to be engaged in what was called the Midway case.

Q. That was the case in which two men who located a petroleum land in Section 26 was set upon one night and nearly murdered, was it not? A. No.

Q. They were shot, both of them? A. No.

Q. When was that, and who were shot? A. A couple of imported gun-fighters.

Q. A couple of imported gun-fighters who were there endeavoring to hold the claim, is not that true? A. What is the question?

Q. A couple of gun-fighters, as you say, who were there to hold the oil claim? A. They were of a party that had taken possession by force of an oil claim belonging to other people; yes.

Q. And they were shot? A. They were.

Q. It was investigating the shooting that Mr. Tichenor was there for, was it not? A. Presumably, yes.

Q. As a matter of fact it was, was it not? A. It was; yes.

Q. Were you there at that time? A. Where?

Q. At the place where these men were shot? A. I believe I was.

Q. Were you one of the shooters? A. That is what Mr. Tichenor says.

Q. Were you? A. I was.

Q. You were one of the shooters? A. I was.

MR. GOULD: Yes, sir.

MR. CATOR: You are all right.

(Here the witness left the witness stand.)

MR. CATOR: Mr. Jameson, I want to ask you one question where you stand.

MR. GOULD: No, let him step up here.

(Here the witness returned to the witness chair.)

MR. CATOR: Q. Were you tried for that shooting? A. No.

Q. Were you ever prosecuted for it; were you ever exonerated for it in any way?

MR. GOULD: Q. Answer the first question first. Were you ever prosecuted? A. There was an attempt at a prosecution, I believe—a sort of an attempt.

Q. Were you arrested? A. Well, I gave bonds; I never was arrested.

Q. You gave bonds under arrest? A. Yes, sir.

Q. And you were prosecuted with a number of others for the shooting of these two men? A. Well, we were under bonds. I do not know, you can say we were prosecuted. We were never up for examination on it.

Q. And that prosecution was left and was standing for a considerable length of time; nearly two years, as a matter of fact? A. Nearly three years.

MR. CATOR: Q. It has been dismissed? A. Yes, sir.

MR. GOULD: Q. Mr. Tichenor was the man who caused your arrest? A. I do not know.

Q. He was the man who traced the guns into your possession, was he not? A. No.

Q. You did not publicly go out then and proclaim you were the shooter? A. I never denied it.

Q. You never proclaimed you were the shooter? A. I don't know that I publicly proclaimed it.

Q. As a matter of fact, you concealed the fact of it? A. I did not.

Q. Did you shoot a man yourself? A. I am sure I don't know.

Q. You shot at him? A. Sir?

Q. You shot at him? A. I did.

Q. The statute of limitations has run out, Mr. Jameson, has it not? A. I believe it has.

Q. Yes. That is all. A. It would not make any difference, any way.

MR. CATOR: Whatever happened, no man would believe Mr. Tichenor, any way?

MR. McNAB: That is an objectionable question.

THE CHAIRMAN: The objection is sustained on that.

TESTIMONY OF SAM J. DUNLAP.

Sworn.

MR. CATOR: Q. Mr. Dunlap, where do you reside? A. Bakersfield.

Q. How long have you lived there? A. Why, on and off since 1889.

Q. What is your occupation? A. Railroad conductor.

Q. Do you know of George Tichenor? A. I do.

Q. Do you know his general reputation for truth and veracity, honesty and integrity in that community? A. I do.

Q. Is it good or bad? A. Very bad.

Q. From what you know of that reputation, would you believe him under oath? A. I would not.

MR. CATOR: Take the witness.

Cross-Examination.

MR. GOULD: Q. Mr. Dunlap, you were the man that claimed this land that was jumped in the Midway District? A. I am one of them.

Q. You are one of the men that claimed the land that was jumped? A. Yes, sir.

Q. Mr. Tichenor appeared as a detective in the employ of the Pinkerton company for the purpose of investigating and ascertaining who the shooters were? A. He denied that to me.

Q. Never mind; you knew as a matter of fact that he was. A. I have heard that he was.

Q. You know then, as a matter of fact, that he was. A. I have heard so.

Q. And it was because of his activity in this matter that you were prejudiced against him? A. To a certain extent. I have reasons to disbelieve anything he would say.

Q. You were with that party who did the shooting on that night? A. I was.

Q. You handled one of the guns? A. I did.

Q. You were one of that armed body of men who ordered Cornell, who was on guard duty, to throw up his hands? A. He done the same with me.

Q. Answer that question. A. Yes, sir.

Q. And he refused to do so? A. I don't know.

Q. And then you got shooting? A. I don't know as he refused.

Q. Did you shoot? A. Well, I think I did.

Q. Did you shoot Cornell? A. I don't think I did.

Q. Did you see him fall? A. I did not.

Q. Did you publicly proclaim the fact that you went there on that night to kill these men if they resisted, and that you did shoot them?

A. I did not proclaim that I went there to kill them at all.

Q. You did not proclaim that you went there at all? A. Yes, I did.

Q. Publicly? A. Publicly. I told everybody I was there.

Q. How long after that? A. At the time.

Q. Immediately thereafter? A. A day or two.

Q. A day or two? A. As soon as I got back to Bakersfield.

Q. Did you tell Mr. Tichenor that? A. Did I tell Mr. Tichenor that?

Q. Yes. A. I told him when he was trying to pump me in my own house and get the information that he thought he might get from me, I told him that I did not think it was any of his business at the time.

Q. Did you ever tell Mr. Tichenor what you are telling me now? A. I did.

Q. When? A. In my own house.

Q. When? A. In Los Angeles in 1901.

Q. When did this take place, this killing? A. April. There was no killing. There was no killing done.

Q. Shooting. When did you tell him? A. I could not say what month it was.

Q. About what month in 1901? A. I should judge it was about the month of May or June.

Q. As a matter of fact the occurrence was that you got drunk, and you whipped a man by the name of Bous and got hurt, and then whilst under the doctor's care you confessed your connection with this affair to the doctor did you not? A. I did not confess it.

Q. You did not? A. No, sir.

Q. How about the other part of the question? A. I had been, like a good many others, a little bit loaded.

Q. That is the time you told it? A. That is the time I did not tell them.

Q. And the only knowledge that you had of Mr. Tichenor was in connection with that shooting in Midway at that time? A. Well, I have heard his name mentioned.

Q. Mentioned by others? A. Yes, sir; by others.

Q. Connected with it? A. No, not connected exactly with that affair.

Q. Not exactly but collaterally? A. I have heard his name mentioned before this affair occurred at all.

Q. Where? A. At different times.

Q. Where? A. I have heard his name mentioned in Fresno.

Q. Why and when? A. Along about 1900, I presume; somewhere along there.

Q. Well, when? A. Well, I cannot just name the date.

Q. Who mentioned his name? A. Well, I can probably, with a little time, get them.

Q. Well, take the time. A. I heard a Mr. Nicol mention his name.

Q. Who was Mr. Nicol? A. He was a conductor on the Santa Fé.

Q. Mr. Nicol spoke about Mr. Tichenor, did he? A. Yes, sir.

Q. That was the first time you ever heard about Mr. Tichenor, was it? A. I heard of Mr. Tichenor, I believe, as a Pullman conductor.

Q. When did you hear of him as a Pullman conductor? A. That I could not say. I believe it was along in 1897 that he had been a Pullman conductor, and turned out later to be a spotter. That is what I heard.

Q. And these things—his connection with this shooting in the Midway and the fact that Mr. Tichenor—it had been stated to you that Mr. Tichenor had been a "spotter"—are the two things on which you base your testimony of him to-night, is it? A. Well, there is another fact that I can base my opinion on, and that is when I asked him in my house, when at the interview, I says: "Who are you; who are you working for; what is your business; what are you here for?" "Well," he says: "you know I don't want to injure you boys any." He was kind enough to give me an idea he had been in the railroad business, which I knew, and I says: "You are a Pinkerton man." And he says: "I am working in the interest of the State;" and he says: "I want to get the facts from both sides." He did not injure me. He just wanted to know the facts from both sides, and asked me this question and I refused to answer.

Q. And you refused to answer? A. I did.

Q. And these other facts are the facts on which you base your testimony, are they? A. And what I heard generally around town whenever his name was mentioned by anybody.

Q. The people there are very good to Mr. Tichenor? A. Well, he is not very popular.

Q. That is right. A. He could not be mayor of the town.

Q. He could not be mayor of the town? A. No; I don't think so.

Q. Were you one of the people who was arrested at the time of this shooting? A. I don't know that you would call it arrest; I was under bonds.

Q. You were under bonds? A. Yes, sir.

Q. You were not tried finally? A. I believe that there was a preliminary.

Q. How many people were there that were interested in that shooting that night that were arrested? A. I can not tell you.

Q. Well, about how many?

MR. CATOR: I object. We are not trying the case of those outside people. You ask him what he did.

MR. GOULD: I want to show that this reputation that Mr. Tichenor had in the town of Bakersfield—that these gentlemen, who were leading citizens at that time, disguised themselves, and went out at night on to this section of land that was under controversy and shot down those two men. That is what I want to show, and who they are.

THE CHAIRMAN: The objection is overruled by the committee.

MR. GOULD: Q. And you armed yourself with others? A. I did.

Q. You did not take your gun over there with you, did you? A. I had a gun there.

Q. The guns were over there before? A. No, sir. There were guns there; yes, sir.

Q. And you took some over in your wagons? A. I took some in my wagon.

Q. These guns were bought new for that purpose? A. I don't know.

Q. You got them yourself out of the depot? A. I did not.

Q. You knew they were got out of the depot? A. No, sir; I did not know.

Q. What did you go over there for? A. We went over to eject or to have these people move off of our border.

Q. Or shoot them if they did not? A. No, that was not the intention.

Q. It was not the intent to shoot them? A. No, the intent was to defend ourselves.

Q. Why did you take guns? A. Because these parties, when they went over to jump the claims in the controversy, they had guns.

Q. And you took the guns back? A. You bet.

Q. At what time did you leave Bakersfield? A. I cannot give you the hour.

Q. About what hour? A. I think about 9.

Q. At what time did you arrive on the scene? A. Well, I don't think I looked at my watch.

Q. About what time? A. Oh, I should judge about 11 o'clock.

Q. About 11 o'clock in the night? A. I think so. Now I would not say for certain.

Q. I was about—— A. (Interrupting.) Somewheres about three or four hours.

Q. How many men were there with you? A. I could not say.

Q. About how many? A. There might have been a dozen; there might have been fifteen.

Q. Might have been fifteen? A. I say there might.

Q. How many men were on this claim? A. How many men were there on the claim?

Q. Yes. A. How do you mean?

Q. Those that you went to eject? A. I cannot tell you.

Q. About how many? A. I don't know; a good many.

Q. How many did you see? A. Well, I saw, I suppose, about ten or twelve men.

Q. You saw ten or twelve men? A. Yes, sir.

Q. Before you commenced your proceedings up there, you proceeded to elect a captain, did you not? A. There was no captain elected that I know of.

Q. Was not the doctor down there elected captain? A. No, sir; he was not.

Q. You had not been drunk that night, had you? A. No, sir, nor to-night.

Q. Nor to-night? A. No, sir.

Q. Mr. Tichenor was announced down there as a Pinkerton detective? A. I don't know as he was or not. I never classed him as that—as a detective. I always considered him as a spotter.

Q. Well, you name the names of the people that were there that night. A. Give the names of—

Q. (Interrupting.) People who were there that night. A. I could not give you the names of all the people that were there.

Q. Give me the names of all you can?

MR. ALEXANDER: We will have to object to that question, if your Honor pleases. It has got beyond all limits, and no good can be subserved thereby. He has stated the number.

MR. GOULD: I will withdraw that question.

MR. GOULD: Q. These people who went there lived in Bakersfield? A. The people who went with whom?

Q. That did the shooting, lived in Bakersfield and vicinity? A. Yes, sir.

Q. And some of them were leading citizens down there? A. Yes, sir.

Q. And you have heard many of these people talk since that time about Mr. Tichenor? A. Yes, sir; I have heard them express their opinion.

Q. They talk pretty hard, don't they? A. They don't talk very nice about him.

Q. It was through Mr. Tichenor's efforts that these men were all arrested and charged with assault to commit murder? A. I don't know what the subject was, and whether it was Mr. Tichenor or not.

Q. That was the charge? A. I believe that was the charge.

Q. And he was the detective, of course? A. They said he was.

Q. And you were one of the men charged with assault to commit murder? A. Yes, sir.

MR. GOULD: That is all.

MR. ALEXANDER: Q. You have heard others besides those who were there that night speak regarding the reputation of Mr. Tichenor? A. Often.

Q. What was their opinion? A. That he was no good.

Q. No good? That is all.

MR. GOULD: That is all.

TESTIMONY OF BERT M. TIBBET.

Sworn.

MR. CATOR: Q. Mr. Tibbet, where do you reside? A. Bakersfield.

Q. How long? A. Oh, about twenty-nine years.

Q. All your life? A. Practically, nearly all my life.

Q. What is your occupation? A. Police officer.

Q. Did you know this man Tichenor there in 1901? A. I heard of him.

Q. Do you know his general reputation in that community for truth and veracity, honesty and integrity? A. I do.

Q. Is it good or bad? A. Very bad.

Q. From what you know of it, would you believe him under oath? A. I think not.

Q. Do you know the general reputation of Henry Hartling in that community? A. Yes, sir.

Q. His general reputation for truth and veracity? A. Yes, sir.

Q. Is it good or bad? A. Very bad.

Q. From what you know of it, would you believe him under oath? A. I would not.

MR. CATOR: Take the witness.

Cross-Examination.

MR. McNAB: Q. Mr. Tibbet, you knew that Mr. Tichenor was acting for the Haggin & Tevis people in the contest with swamp-land settlers of Kern county, did you not? A. I heard that since he moved away from there.

Q. You knew he was there for about a period of three years in that controversy, did you not? A. I did.

Q. And the conversation you heard in regard to Mr. Hartling was in respect to these transactions, was it not? A. Not altogether; no, sir.

Q. Well, it largely grew out of it, did it not? A. Well, if he had not been there, we would not have heard of him, but all that I have heard to his discredit did not grow out of that controversy.

Q. He was there for three years, was he not, in that matter? A. I believe so; yes, sir.

Q. He never had any other occupation in Kern County except that for Haggin & Tevis in the prosecution of the swamp-land settlers, did he? A. Not that I know of.

Q. You never knew of him having any other? A. I did not.

Q. That created a great deal of controversy, did it not, in Kern County? A. It did not.

Q. A very large amount of feeling was displayed over that? A. Well, not so very much feeling, except those who were interested.

Q. Those who were interested were quite numerous, were they not? A. Not so very. I hardly think that there was over twenty-four people interested.

Q. I beg your pardon? A. I hardly think there was over twenty-four people interested. There may have been more.

Q. There was fifty thousand acres of land involved, was there not? A. Yes, sir.

Q. And it created a great deal of excitement at the time? A. It did.

Q. And a great deal of talk as to the rights of settlers and the rights of Haggin & Tevis to the land? A. Yes, sir.

Q. And Mr. Hartling was living in that section for the purpose of obtaining evidence, was he not, in these transactions? A. It looked that way. He certainly turned it in.

Q. That was his purpose in being there as a detective, was it not? A. It developed later he was.

Q. And when it developed he was a detective, there was a great deal of adverse discussion of Mr. Hartling, was there not? A. Yes, sir; together with that and other things, too.

Q. He never had any other occupation, you say, than that of detective in that land transaction? A. Not that I know of.

Q. He engaged in no other business in Kern county but that, did he, during that time? A. Not that I know of.

Q. Then all his business connection in Kern County of any kind or nature whatsoever was in regard to his detective duties in that controversy, were they not? A. Must have been.

Q. And you never heard of his having any other business transactions other than those, had you? A. I have said I have not.

Q. Now, Mr. Tibbet, you have said you heard his reputation discussed? A. I have; yes, sir.

Q. You know, as a fact, that Mr. Tichenor was the detective in the controversy over certain lands—oil lands in Kern county, in which two men were shot, do you not? A. I have heard that he was; yes, sir.

Q. You knew that he was, did you not? A. I believe so; yes, sir.

Q. Was it not the report? A. Yes, sir.

Q. And many of the leading citizens of Bakersfield were interested in that controversy, were they not? A. Yes, sir.

Q. And a number of them were arrested, were they not? A. I believe so.

Q. Did you ever hear of Mr. Tichenor having any other business transaction in Kern County except in connection with that controversy? A. I heard of something when they threw him out of the sheriff's office one morning, but I do not know the connection of the case; but he was ejected from the office.

Q. When was that? A. That was about this time.

Q. And it was an incident connected with the shooting, was it not? A. I could not say, but I have been told it was another matter.

Q. You do not know of your own knowledge it was another matter? A. No.

Q. Did you ever know of your own knowledge that he had ever had any other business in Kern County except that in relation to the shooting of these two men? A. I did not.

Q. You knew he was a Pinkerton detective, did you not? A. I did not.

Q. You knew he was there for the apprehension of those who had shot those two men in the controversy over the land, did you not? A. Yes, sir; Cornell told me that.

Q. And you never knew of any other business he had of any kind or nature in Kern County? A. Only what I told in connection with the —

Q. Sheriff's office? A. Yes, sir.

Q. What is the name of the sheriff? A. H. L. Burghardt.

Q. Aside, then, from the circumstances that you saw him, and the controversy in the sheriff's office, and the fact that he was pursuing and attempting to apprehend these men who had been engaged in the shooting, you know of no other relationship Mr. Tichenor had to the affairs of Kern County, did you? A. No, sir.

Q. Then the conversation in regard to that, and any information you could have possessed that could have influenced your mind, must have arisen out of these transactions? A. Well, that, together with what Cornell told me.

Q. That is all that influences your mind? A. Yes, sir; put all together with what Cornell told me.

MR. McNAB: That is all.

MR. CATOR: Q. What is this other matter that you refer to that they did not ask you about, that you heard in the sheriff's office? A. I say I do not recollect it exactly. I was told—my recollection is that it was a matter apart from the Midway shooting matter.

MR. McNAB: Q. You do not know that? A. No, sir.

MR. CATOR: Mr. McNab, wait until I get through, and then if you want to examine him, you can do so. You have that right.

MR. McNAB: Q. In respect to this reputation that you heard the people give him, is there in that reputation anything in regard to his furnishing evidence or swearing tough cases through? A. I have heard talk among the officers there that his motives were in working up a case to do anything—go to any extremes to furnish evidence to accomplish anything necessary to a conviction.

Q. That he would furnish it himself? A. Yes, sir, if necessary.

Q. Was that the general expression among them all? A. No; that came to me from those who had been connected with him.

MR. ALEXANDER: Q. Those who had been connected with him? A. Yes, sir.

MR. CATOR: Q. Hartling, you say, was a detective there; did he take up a piece of land and pretend to be a settler there himself? A. Yes, sir.

Q. Did not part of this feeling arise out of the fact that he acted distastefully in the matter toward the settlers? A. It must have arisen out of that fact; yes, sir.

Q. Anything ever said about his killing cattle? A. Yes, sir.

Q. What about that? A. My brother was riding there at the time, and he told me he was watching Hartling catching—killing cattle.

Q. Whose cattle? A. The Land Company's.

Q. Whose? A. Kern County Land Company's cattle.

Q. For what purpose, did you understand? A. What do you mean?

Q. For what purpose was he killing them? A. For his own purpose, I suppose. When he wanted a calf or a cow, he would go and get it.

MR. CATOR: That is all.

MR. SIMPSON: I would like to ask a question. Q. Was there much public feeling aroused over the settlement of this land out there in Bakersfield and thereabout? A. Yes, sir; a great deal.

Q. Was there much sympathy expressed. A. Yes, sir, there was.

Q. Was it one-sided or not? A. What I heard of it was one-sided.

Q. Against the case which these detectives were working up, or against the parties for whom these detectives were working, or not? A. Yes, sir; it was principally the case the detectives were working—the swamp-land settlers.

THE CHAIRMAN: Q. In favor of the settlers? A. Yes, sir.

THE CHAIRMAN: Mr. McNab, do you desire to question the witness any further?

MR. McNAB: No, sir.

THE CHAIRMAN: That is all.

TESTIMONY OF JOHN F. DOOLEY.

Sworn.

MR. CATOR: Q. Where do you live? A. Bakersfield.

Q. How long have you lived there? A. Since 1892.

Q. What is your occupation? A. Miner.

Q. Do you know of the general reputation of Henry Hartling in that community for truth and veracity and integrity? A. Yes, sir.

Q. Is it good or bad? A. Bad.

Q. From what you know of it, would you believe him under oath?

A. No, sir; I would not.

MR. CATOR: Take the witness.

Cross-Examination.

MR. McNAB: Q. Mr. Dooley, you were one of the swamp-land settlers in Kern County, were you not? A. Yes, sir.

Q. You were one of those engaged in the controversy with Haggin & Tevis, they seeking to obtain the land, and you to hold it; was that the controversy? A. Yes, sir.

Q. Hartling was a detective for Haggin & Tevis, was he not, in obtaining the information on which the company was to act against the settlers, was he not? A. Well, he was a settler there himself, like the rest of us.

Q. He obtained the information as a detective by settling upon some of the land, did he not, among you? A. Yes, sir; that was our opinion of it.

Q. And pretended to be a settler? A. Yes, sir.

Q. There was a great deal of feeling, was there not, when it was discovered that Mr. Hartling had been a detective for Haggin & Tevis? A. Yes, sir.

Q. A great deal of ill-will was generated at that time, was there not? A. Well, we did not feel very good to him at that time.

Q. In fact you felt very bitter towards him? A. Yes, sir; when we found it out.

Q. And it would not have been safe for him to have been around there after it was discovered, would it? A. I do not know that anybody would hurt him.

Q. Did you ever know of Mr. Hartling having any other business in Kern County except that as a detective for Haggin & Tevis in that land controversy? A. Well he was—owned land there—a farmer.

Q. And afterwards it developed that he simply entered that as a detective, did he not; did it not afterwards appear that he simply used that as part of his process as against the settlers? A. Yes, sir.

Q. Aside from his business as a so-called settler, and in conjunction with his work as a detective for Haggin & Tevis' people, you never knew of him having any other business in Kern County at all, did you? A. No, sir.

Q. That, as far as you know, is his sole business connection in that county? A. Yes, sir, that was our belief that he was.

Q. You never heard of any other? A. No, sir; I never heard of any other.

Q. You never heard him discussed or spoken of except in that transaction, did you? A. No, sir.

MR. McNAB: That is all.

MR. CATOR: That is all.

TESTIMONY OF JAMES A. BERNARD.

Sworn.

MR. CATOR: Q. Where do you reside? A. In Kern, Kern County—town of Kern.

Q. Does that adjoin Bakersfield? A. Yes, sir.

Q. Are you acquainted in the community of Bakersfield? A. Yes, sir; very well.

Q. What is your occupation? A. I deal in real estate.

Q. How long have you resided there? A. Since 1873.

Q. Do you know the general reputation of Henry Hartling for truth and veracity and integrity in that community? A. By hearsay; yes, sir.

Q. Is it good or bad? A. It is bad.

Q. From what you know of it, would you believe him under oath? A. No; I do not think that I would, from the reputation that he has there.

Q. Do you know the general reputation of George Tichenor in that community for truth and veracity? A. Yes, sir.

Q. And integrity? A. Yes, sir.

Q. Is it good or bad? A. Bad.

Q. From what you know of his general reputation, would you believe him under oath? A. No, sir; I would not.

MR. CATOR: Take the witness.

Cross-Examination.

MR. NICOL: Q. How old are you? A. I was born in 1854—fifty-one years old.

Q. And you have resided in Bakersfield how long? A. Since 1873, the first day of March.

Q. Been engaged in the business of real estate? A. Yes, sir; I was railroading and real estate.

Q. Do you know the gentlemen in that community who have testified here as to the reputation of Mr. Tichenor and Mr. Hartling? A. Do what?

Q. Do you know those gentlemen who came here this evening to testify to the reputation of these men? A. Yes, sir; most of them, I do.

Q. Did you hear those two men say that they went out with guns to drive men off of the claims? A. What I could catch of it—I was back in there.

Q. Did you hear them discuss the reputation of these two men? A. I have heard those with others.

Q. They did not like them, did they? A. I do not know that they did.

Q. They did not give them a good reputation? A. I do not know of anybody in Kern County that did.

Q. Confine yourself to my question. They did not give them a good reputation? A. No.

Q. And you base your opinion on what they said? A. Partly with theirs and with other people's in Kern County.

Q. How many people in Kern County have you heard talk about it? A. I presume I have heard off and on seventy-five or a hundred.

Q. Seventy-five or a hundred. A. May be a hundred and fifty, I think.

Q. Were you interested in these swamp lands that Mr. Hartling was acting as detective in? A. No, sir.

Q. You heard him spoken of in connection with that? A. Yes, sir.

Q. The people there were quite angry when they heard he was a spy and representing the other side? A. Decidedly so.

Q. Of course, you would not believe a spy under oath? A. No, would you?

Q. I am asking you the question. And because you found he was a spy, you say you would not believe him under oath? A. No; I would not.

Q. That is the reputation on which you base your opinion? A. Yes, sir; that is the reputation my neighbors give him.

Q. That is the sole reputation on which you base your opinion? A. I am not personally acquainted with the man, and have had no business dealings with him in any way, shape or form.

Q. Is that the sole thing on which you base your opinion? A. Yes, sir. Reputation is what I base it on.

Q. That man was a detective? A. Yes, sir.

Q. And gave information? Yes, sir.

Q. And because of that, you would not believe him under oath? A. Yes, sir; he was a spy—a traitor.

Q. You heard some mention about Tichenor in connection with this shooting? A. Yes, sir.

Q. Did you ever hear him mentioned in connection with any other matter? A. Yes, sir.

Q. When? A. I could not tell you just exactly what.

Q. Recently? A. No; I do not know that I have recently.

Q. What is that? I do not know that I have recently.

Q. How recently—how long was it you heard this man discussed? A. Well, of course I have heard him discussed recently very much.

Q. Was it while you were in the railroad service, or after you were discharged? A. What?

Q. Was it while you were in the railroad service, or after you were discharged? A. When was I discharged?

Q. Just answer my question. A. I never was discharged.

Q. Answer my question.

MR. COPELAND: Ask him a decent question and he will answer it.

Q. Were you not in the railroad service, and were you not discharged from the railroad service? A. From 1881 to 1890 and '91, I think, I was in the railroad service, when my father died and I took charge of his business.

Q. Were you discharged? A. No, sir.

Q. Or did you leave the employment? A. No, sir. Do you want my papers? I think I have them at home.

Q. I am not asking for that, my friend; I am asking you the question as it was suggested to me. In what connection did you hear Mr. Tichenor spoken of? A. That his reputation was bad.

Q. In what way did they discuss his reputation? A. That he was a traitor and a spy.

Q. In what? A. Pretending to be a detective, when he was not.

Q. Mr. Tichenor? A. Oh; Mr. Tichenor.

MR. CATOR: I did not ask anything about Mr. Tichenor.

THE CHAIRMAN: You did.

MR. NICOL: Q. In what connection did you hear him discussed? A. In connection with that shooting. As to the facts of it——

Q. (Interrupting.) I do not care anything about the facts. I am

simply asking you. Is it not a fact, Mr. Bernard, that the only discussion you ever heard of this man Tichenor was in connection with this difficulty out of which this shooting arose? A. Yes, sir.

Q. And you learned he was a detective, too? A. Yes, sir.

Q. And you would not believe a detective under oath? A. That is a pretty hard question to answer. Yes; I think I would believe a detective under oath. I think, perhaps, that there are some few honorable detectives.

MR. McNAB: They do not catch anybody.

MR. NICOL: Q. All you heard in connection with this matter was in connection with this shooting scrape? A. Yes, sir. I do not think he is one in that class.

Q. Possibly the same thing may be indulged about you. A. Possibly.

Q. We are not asking you what you thought about this man, but about his reputation. That is all.

MR. CATOR: That is all.

MR. SIMPSON: May I ask how many more witnesses you have?

MR. CATOR: I have only two more from Bakersfield, that I have thus far noted.

MR. SIMPSON: I would suggest that if there are many witnesses on this subject, we adopt an alternative plan. There are possibly witnesses from the other side who want to get away, and I would suggest that they may be permitted to put on ten witnesses now.

MR. McNAB: We had thought that we would be called in the regular way in rebuttal, and we have not subpoenaed any witnesses for to-night.

MR. SIMPSON: Very well, then, I will withdraw the suggestion.

TESTIMONY OF J. W. BRISCOE.

Sworn.

MR. SIMPSON: Mr. Cator, I was going to suggest that it would not be exactly fair for the committee to go much further, if it was going to adopt a rule at this time with reference to the calling of the witnesses. Personally I believe that twenty witnesses on each side are amply sufficient, and I would suggest to the committee at this time, that each side be limited to twenty witnesses on the question of character.

THE CHAIRMAN: Do you make that motion?

MR. SIMPSON: I make that motion.

MR. CATOR: If the Senators please, we state this: That our witnesses are from other places, and I have but two more to examine here. I think before you make that limitation that you ought to hear testimony from other places. We might make this limitation to the particular class of evidence you have heard so far. In a few moments I will call Mr. Cross, if he is in the house. I would like to ask the Sergeant-at-Arms to ask if Mr. Cross is here.

MR. RALSTON: There he is [indicating Mr. C. W. Cross].

MR. CATOR: After that, if the question of limitation comes up, I think we may be able to pass on it without any difference of opinion. At this time, the committee might act differently from what they would, because these witnesses are all from one place.

THE CHAIRMAN: This is the eleventh witness. Is there a second to Senator Simpson's motion?

MR. CATOR: Is this the eleventh witness I have called?

THE CHAIRMAN: Yes, sir; the eleventh witness.

MR. RALSTON: I second it.

THE CHAIRMAN: It has been moved and seconded that the witnesses as to character—impeachment witnesses, I suppose you would call them—be limited to twenty on each side. Are you ready for the question?

MR. ALEXANDER: I wish to have this to say: We have been forced to call to-night those witnesses who have got here in answer to the subpoenas which were issued. Those whom we have called have been from one place, because it was the most accessible, and therefore those were the first upon the scene. We have, however, coming from various parts of the State witnesses who can testify to other and different facts regarding these same persons. If we are to be limited to any set number, we would not go on with these, but it would necessitate an adjournment until these other witnesses could be present, because these other witnesses will be different in kind and character from the others who have been put on the stand.

MR. ROWELL: How many?

MR. ALEXANDER: There will be fifty altogether.

MR. GOULD: Is it understood they will be witnesses as to character?

MR. ALEXANDER: If you will go into details you will find out the species of character.

MR. GOULD: I could not go into details.

MR. CATOR: The question that is talked about is one of time. Nobody is more desirous than I am of economizing in time. In a little over an hour I have examined eleven witnesses, and most of that time has been taken up by the cross-examination. The prosecution here occupied three entire sittings in putting in its case, and nothing was said then about time. It seems to me it is a little hard on these accused, who have everything at stake here, that when they have examined eleven witnesses in a little over an hour, to cut them down to twenty witnesses, which will give them only about two hours, when I have to state that we have no other evidence to offer, except the evidence of the four Senators themselves, which you must be as good a judge as myself as to how much time it will take; but it will be a very brief examination of the four Senators, in my judgment, and it could not take over two hours at the utmost imagination, and if we are to be limited in the examination of the other witnesses, most of which is done by the other side in cross-examination, that is allowing us four hours to put in the case for the defense, after the prosecution has occupied three sittings. I am willing for a reasonable limitation. I do not think that all the witnesses that have been subpoenaed will come here. I do not think it is a wise thing to make a limitation at this sitting. I think we should be permitted to go ahead this evening, and then we will have to resume and see who is here, and if we desire further testimony; but I do not think this committee is willing, on so grave a matter as this, to say, because so much time has been taken by the prosecution, that we should not have the time.

THE CHAIRMAN: I think you misunderstood the committee. We have no desire to shut off any witnesses, but the character witnesses that have been put on here have been toward the impeachment of the two principal witnesses, who have been representing—I do not want to call it the prosecution——

MR. CATOR: The explosion.

THE CHAIRMAN: The explosion.

MR. JACOBS: Mr. Chairman—

THE CHAIRMAN: Just one moment, until I finish. You have had eleven witnesses along that line. It appears to me that twenty witnesses along that line will be sufficient as to the character of the two witnesses presented here by the prosecution. We have no desire to limit the witnesses at all. What would be the use? Twenty would be just as good as a hundred or two hundred.

MR. CATOR: I simply say that if it is time that the committee is looking to in the matter, that I desire you to know that there are no other witnesses on my part that I know of—except the four Senators—except this class of testimony.

THE CHAIRMAN: I say that the committee feels that twenty witnesses on this subject will be sufficient. It is a great many more than they allow usually, is it not?

MR. SIMPSON: I, personally, do not wish to shut off anybody in this investigation, but somebody has got to keep it moving. I, for one, do not want to hear from fifty witnesses on each side on this question of character, which is a secondary issue in the case, and while it may be a little early to make a limitation in this case, I will withdraw my motion in the form in which I placed it, and make it twenty-five in each case, and I move you that a limitation of twenty-five be made on each side.

MR. DIGGS: Second the motion.

THE CHAIRMAN: It has been moved and seconded that the witnesses as to character—impeachment witnesses, I suppose they will be called—be limited to twenty-five on each side. Is the committee ready for the question?

MR. JACOBS: Mr. Chairman, there is one question in connection with this matter that I would like to call your attention to. The committee will notice that the witnesses who have been called thus far to testify to the reputation have been from Bakersfield and Kern. Had we known that there would have been a limitation on this subject, we would not have called so many from this district. The committee will remember from this testimony that those two witnesses lived at various parts of the State—Downieville, San Luis Obispo, Los Angeles, Bakersfield, Fresno, and so forth. It was the purpose of the defense to bring witnesses from these various places to show this committee that these men bore the same reputation in all the places that they had resided, as they do in Bakersfield, and, as I said before, had I anticipated that there would be a limitation to the number of witnesses, we would not have burdened the committee with ten witnesses from the town of Bakersfield. It would be an unjust motion, and it would debar us from presenting testimony from these various places.

THE CHAIRMAN: You have taken witnesses from Bakersfield. Why put on any more from Bakersfield and Kern?

MR. JACOBS: It may not be necessary. If the committee is satisfied with the number of witnesses and the character of the testimony—I am not in a position to say what this committee thinks of this character of testimony, whether or not it is sufficient, but we are here with more witnesses; we have a number of witnesses from Bakersfield. In fact, we could have brought maybe two hundred and fifty men, perhaps five hundred, had it not been for the expense and the time, but we cannot

do it; but it does seem to me that we ought to have the privilege of going to these various places that these men have resided—say for twenty years; yes, twenty years—and show this committee the reputation that they have borne in all these different places, and that it has been bad.

MR. SIMPSON: I intimated at the opening of this examination that I would probably make a motion to this effect, not naming the number, however, and I, for one, think you have got enough witnesses from Bakersfield. You can do as you please about that. I think twenty-five is ample, and gives everybody an opportunity. It is a customary limitation in courts of justice to limit the number and fix the number, and I think it is reasonable.

THE CHAIRMAN: Is the committee ready for the question?

MR. JACOBS: I would like to state that these witnesses have been subpœnaed, and many of them are here, and many on the road. There is a train that is late, that is past due now, bearing a number of witnesses, I understand, from Bakersfield and from the southern portion of the State, and from other places.

MR. ROWELL: I thought the intimation was given that only a reasonable number of witnesses would be allowed from a section of the country.

MR. JACOBS: What would be a reasonable number of witnesses? That is a question. In San Francisco, you might say it would be four or five thousand; in a small place, you might say twenty. It is an easy matter for us to get witnesses. I wish the committee would indicate the number of witnesses they wish to hear from each place.

MR. SIMPSON: How many witnesses have you Mr. Gould, on this subject?

MR. GOULD: I do not think more than twenty.

MR. SIMPSON: Subpœnaed to be here to-night?

MR. GOULD: No; we have none to be here to-night.

MR. SIMPSON: I withdraw the motion, Mr. Chairman.

THE CHAIRMAN: Mr. Cator, have you any idea how many character witnesses—impeaching witnesses—you desire to bring here?

MR. CATOR: If the committee thinks that twenty-five witnesses is all they want, I am not making any very strong protest against the passage of the motion.

THE CHAIRMAN: As a matter of fact, you think that is liberal?

MR. CATOR: I think if we were in court, we might not be allowed that. If you think twenty-five is fair, I am willing for the committee to state the number.

MR. RALSTON: How many do you think you ought to be allowed?

MR. CATOR: I am unable to tell, because I have been unable to see the others. If I had them all together, I could tell very quickly, but I could not tell now. Perhaps, if we had examined some other witnesses—I have not seen them all—we would have had some others testify. If the committee will allow us twenty-five, and allow us to make a fair selection out of that twenty-five, and not be indiscriminate—

THE CHAIRMAN: Certainly. There is no question but what the committee will give you ample time to interview your witnesses.

MR. CATOR: I understand it is not a limitation on time; it is on the number.

THE CHAIRMAN: Yes, sir. If we cannot proceed this evening; we can some other evening.

MR. CATOR: We are not attempting to dictate to the committee.

THE CHAIRMAN: In the judgment of the committee, there is no use in lumbering up the record with a lot of testimony, all of the same kind.

MR. CATOR: That is right.

THE CHAIRMAN: It does not help the case.

MR. CATOR: I think we have enough from Bakersfield.

THE CHAIRMAN: If there is no objection on the part of the committee, each side will be limited to twenty-five upon impeachment until further order.

MR. CATOR: Is this the eleventh or twelfth witness?

THE CHAIRMAN: This is the eleventh.

MR. CATOR: Under the ruling, I will reserve the right to select our own witnesses, and have this one returned, if we want him. I will withdraw this witness from the stand.

THE CHAIRMAN: All right.

MR. CATOR: And I will call Mr. C. W. Cross. Mr. Chairman, I would like to have you announce that no witnesses that have been subpoenaed here are excused.

THE CHAIRMAN: Oh, no.

MR. CATOR: They are required to be in attendance while this committee is in session.

THE CHAIRMAN: That is the understanding. The witnesses will be in attendance until they are excused.

TESTIMONY OF C. W. CROSS.

Sworn.

MR. CATOR: Q. Where do you reside, Senator? A. 19 Baker street, San Francisco.

Q. How long have you resided in San Francisco? A. About seventeen or eighteen years.

Q. Where did you reside prior to that? A. Nevada City for ten years.

Q. Did you, while you lived in that community, know Henry Hartling? A. I did.

Q. And about how long did you know him? A. As near as I can recollect, I have known Henry Hartling about twenty-two years—perhaps twenty-three.

Q. What is your occupation? A. A lawyer, to put it plain.

Q. What do you know of his general reputation for integrity and veracity and truth in the community at Downieville and adjacent? A. I knew Henry Hartling's general reputation for truth and honesty in Sierra County until the time he came to San Francisco. I have known him from time to time since he came to San Francisco. I do not know his reputation in San Francisco. I do not know the man that lives next to me unless he has a door plate, and in those large office buildings we do not know who is in the next office, sometimes, unless his name is on the door. I cannot testify to Henry Hartling's reputation in San Francisco, but if allowed, I could testify to his character since he has been in San Francisco.

Q. What was his reputation for truth and veracity and honesty and integrity in Sierra County? A. When I knew Henry Hartling in Sierra County, his reputation for swearing falsely was just as bad as a

man's could be, and no man that knows Henry Hartlings's character will put him on the stand as a witness to prove anything that is respectable.

Q. From what you know of his general reputation, would you believe him under oath? A. No, sir; no man ought to.

Q. And you say you can speak of his character in San Francisco? A. Yes, sir.

Q. What have you to say in regard to that in comparison with what you expressed as to the other?

MR. McNAB: That is objectionable.

THE CHAIRMAN: The objection is sustained by the committee.

Cross-Examination.

MR. McNAB: Q. Mr. Cross, you speak with a great deal of feeling. You had quite a controversy with Henry Hartling in Downieville, did you not? A. Never in my life a word.

Q. You knew at the time he was there he was twice elected Constable by the votes of the people? A. Where was that?

Q. In Downieville? I did not know he was elected Constable.

Q. Of Forest City? A. Do you know Forest City?

Q. I would like you to answer the question. A. Do you mean I was at any election where he was voted for?

Q. No; I did not ask you if you participated in the election. A. I never was at any election.

Q. Did you know he was twice elected Constable in Forest City? A. I say I heard he was Constable.

Q. You say you heard it in very much more modulated tones from what you used when you said you knew his reputation.

A. I knew his reputation, but I do not know he was Constable; that was the difference.

Q. If you were so familiar with his career, why did not you know he was twice elected Constable? A. I say I never heard that. I never heard where he was twice elected Constable. I heard he was Constable of Forest City. I suppose you know how large a town Forest City is.

Q. At that time, it was larger than now? A. I have not been there for years.

Q. It was large enough to have a Constable? A. If Henry Hartling was Constable there, it must have been large enough to have a Constable, and he must have filled the town if he was.

Q. You speak with considerable feeling? A. I do not speak with any feeling, but I do speak with emphasis, because it is a fact that ought to have emphasis wherever Hartling might become a witness.

Q. I see that you have emphasized that very frequently. A. Yes, sir; I may have emphasized that, because I know that.

Q. Did not you have a controversy with Henry Hartling yourself? A. Never in my life.

Q. In a murder case? A. Never in my life.

Q. Now he was a witness against you? A. Never in my life.

Q. Was he not for the prosecution, and you an attorney for the defense in the Aroni murder case? A. I was not an attorney for the prosecution.

Q. Employed for the defense? A. I was employed for the defense.

Q. And you were very bitter at Henry Hartling's prosecution? A. Not at all. He did not prosecute.

Q. Henry Hartling was Constable? A. That I do not remember.

Q. Was he not the man that arrested your client? A. That I do not know. I never heard.

Q. You seem to be short on details. A. No; I ain't short on the real details at all.

Q. You were very much concerned, and there was a great deal of feeling over the prosecution of that man? A. Not that I know of.

Q. You were the attorney in the case. A. I was an attorney in the case.

Q. And you lost the case did you not? A. Well, I do not know whether you would call it that; I was not on trial.

Q. The verdict of the jury convicted the man? A. The verdict of the jury was against the man.

Q. You expressed yourself about that time very bitterly about Hartling did you not? A. Not at all. I did not need to in that community. Let me tell you, they said to me on the street: "Why didn't you pay Hartling ten dollars so he would swear for you?" That was the common talk—I am telling you the true business. And you know better than to use Henry Hartling for a witness when you could hire an honest man.

Q. Who told you that? A. Told what?

Q. About that ten dollars? A. You would hear plenty of people in Downieville.

Q. I do not want "plenty of people"—confine yourself to one. A. I won't give the name of one, because I don't think I can.

Q. No; I don't think you will, and I don't think you can. A. You and I do not need to have a controversy. You and I are lawyers.

MR. RALSTON: Is this a conversation?

MR. NICOL: He stated that, and we want him to give the name of one man.

MR. McNAB: Q. Who was the man? A. I cannot name the man. You must remember this was twenty years ago.

Q. Twenty years ago? A. Yes, sir.

Q. Things have changed in twenty years? A. Mr. Hartling may have reformed, but I have not seen any indications of it.

Q. But if he has reformed, your memory would still go back to that ten-dollar incident, and the name of the man you do not remember? A. Let me answer that. Henry Hartling has occasionally come to my office in recent years, making propositions to me as to what he would do. On that, I am satisfied that Henry Hartling has not reformed.

Q. Will you state one proposition that Henry Hartling came to your office on? A. Do you want me to give it to you just the way he did?

Q. No; I want an answer to the question. I do not want you to editorialize. A. I will not editorialize, but will let you do it—with Mr. Older.

Q. You seem to have some feeling in this case, the way you speak about people? A. No.

Q. Specify one particular case. A. All right. As an example, Mr. Hartling has come to my office a number of times until I said to him I would prefer he would not come there. On one occasion he came in, and I do not remember what the case was that I was engaged in; he said to me: "Cross, do you want any evidence in that case?" I says: "Why?" He says: "Well, if you do, you know me, don't you?" I said: "Yes, Henry, I know you pretty well." Now, you and I understand what that means.

Q. What case? A. I cannot remember.

MR. NICOL: That is another case you cannot remember?

MR. McNAB: Q. That is another case. That is another thing you can not remember. A. I can not remember.

Q. Give us one case. A. I am testifying that Henry Hartling came to my office——

Q. (Interrupting.) You say he came there on several occasions? A. Yes, sir.

Q. Give us one instance. A. Do you mean the day of the week or the month?

Q. Yes; give us one case. A. It did not make any difference what case it was; he was ready.

Q. Name one case. A. I cannot name one case, because I cannot try to.

Q. You cannot name one case? A. No; I won't try to name one case. I don't think one case was mentioned. I don't think one case was in mind.

MR. McNAB: That is all.

MR. CATOR: One moment. Got enough of him now?

MR. McNAB: Yes, sir; quite enough.

MR. CATOR: That is all.

TESTIMONY OF CLARENCE GRAY.

Sworn.

MR. CATOR: Mr. Gray, where do you reside? A. San Francisco.

Q. How long have you resided there? A. About twenty-three years.

Q. What is your occupation? A. An attorney at law.

Q. Do you know Henry Hartling? A. I do.

Q. Do you know his general reputation there for truth and veracity and integrity? A. I do.

Q. Is it good or bad? A. It is very bad.

Q. From what you know of it, would you believe him under oath? A. I would not.

MR. CATOR: Take the witness.

Cross-Examination.

MR. McNAB: Q. You had some unpleasant affair with Mr. Hartling, did you not? A. Yes, sir; I accused him——

Q. (Interrupting.) Didn't you? A. Yes, sir.

Q. He slapped your face one time, did he not? A. He did not.

Q. Didn't you have him arrested before Judge Conlan? A. I did.

Q. And Judge Conlan dismissed the case? A. He did not.

Q. Are you sure of that? A. I am.

Q. Is that as true as anything else you have said? A. That is as true as I am sitting here.

Q. What became of the case? A. I will tell you: I went into a saloon one evening and Hartling was in there, and he accused me of beating him out of some money he was trying to negotiate with two of my clients, and I advised them not to have anything to do with him, that he was a mere matter of merchandise, and they followed my advice; and when I went into the saloon he accused me of something of

that kind, and I turned around to take a drink, and when my back was turned he struck me in the face. I had him arrested for that, but Senator Wilson, J. N. E. Wilson, came to me, who was a friend of his—and Mr. Fitzgerald begged me, on account of his wife, to let up on the case, so I refused to prosecute.

Q. You refused to prosecute, and the case was dismissed? A. I refused to prosecute it.

Q. I want to know if the case was dismissed? A. Well, of course if I refused to prosecute.

Q. That is what I asked you in the first place, if the case was dismissed. A. No; I understood you to mean if the case was heard on its merits and dismissed by Judge Conlan—not at all; it was not heard on its merits at all.

Q. Mr Gray, you have considerable feeling—or considerable feeling was aroused on account of being slapped in the face? A. I have not the slightest feeling—spoke to him several times since.

Q. Your animosity towards him was considerable at the time? A. I entertain no animosity. At that time, of course, it was; but I entertain no personal animosity whatever against him.

Q. Who spoke to you about coming here? A. I was subpœnaed.

Q. Who spoke to you about coming here? A. It is well known, his reputation——

Q. (Interrupting.) One moment. Who spoke to you? A. Nobody that I know of.

Q. Nobody spoke to you? A. Not a one.

Q. Did the man who brought you the subpœna ask you if Henry Hartling slapped your face? A. No, sir. It was Mr. Smith, Deputy Sergeant-at-Arms, who subpœnaed me. All he asked me is what the name was, and I told him.

MR. McNAB: That is all.

MR. CATOR: That is all.

MR. SIMPSON: Q. Are you personally acquainted with anybody connected with this investigation? A. No, sir; I believe I did see a Mr. French, if he is the Mr. French that was Deputy County Clerk down there. I know none of the other gentlemen.

Q. How long ago did this difficulty between you and Mr. Hartling occur? A. Oh, it is over five years ago.

TESTIMONY OF J. S. DALY.

Sworn.

MR. CATOR: Q. Where do you reside? A. San Francisco.

Q. Are you sometimes called Captain Daly? A. Yes, sir.

Q. I only ask that because I have not spoken with you before. A. No.

Q. I only ask that because I have not spoken to you personally before. I only wanted to know what man I was examining. How long have you resided there? A. I came out here first in 1872, and been my home ever since.

Q. What is your occupation? A. At present I am not doing anything.

Q. What has been your occupation? A. Since I have left the sea I have been clerking.

Q. Have you an acquaintance with Henry Hartling, or do you know who he is? A. I know who he is; yes, sir..

Q. Do you know his general reputation in San Francisco for truth and veracity, honesty and integrity? A. Yes, sir.

Q. Is it good or bad? A. Bad.

Q. From what you know of it, would you believe him under oath? A. No, sir.

MR. CATOR: Take the witness.

Cross-Examination.

MR. McNAB: Q. What did you say your occupation is now? A. I have been clerking—

Q. (Interrupting.) No; but what are you doing now? A. Now, I am employed by the Hawaiian-American Steamship Company as a watchman.

Q. I thought you said you had no occupation. A. I am not working to-day.

Q. Are you now employed by that company? A. Yes, sir; as an extra watchman.

Q. When did you work last? A. I worked in November.

Q. That is the last you worked, is it? A. Yes, sir.

Q. Where do you live? A. 3 Fulton street, San Francisco.

Q. And since November you have not done any work? A. No, sir.

Q. How long do you say you have known Mr. Hartling? A. I have known of him for eight or nine years.

Q. What were you doing all the time you knew of him? A. At the time I first knew him, I was deputy in the State—in the Board of Health.

Q. You were deputy in the Board of Health? A. Yes, sir.

Q. How long ago was that? A. I think it was seven or eight years ago.

Q. Seven or eight years ago? A. Yes, sir.

Q. How many times have you met him off and on and spoken to him? A. Well, I have not spoken to him many times.

Q. You have not spoken to him? A. Not many times; no, sir.

Q. How many men have you spoken to with regard to Henry Hartling? A. Well, I have heard his character discussed a number of times.

Q. By whom? A. By a number of ones who seemed to be acquainted with him.

Q. Who? A. I can speak of one man, Mr. Edward Fitzgerald.

Q. What Edward Fitzgerald is that—what is his job? A. He is at present a barkeeper.

Q. Where? A. Market street, San Francisco.

Q. What number—what place? A. I do not know the number—saloon called the Native Son.

Q. Do you know of anybody else? A. Yes, sir. I do not know that I can recollect all the names just now, but I have heard it discussed very often.

Q. Can you name any other person than Mr. Fitzgerald? A. I won't give under oath any names, because I have probably forgotten them.

Q. Then you have only spoken of Mr. Hartling, you say, two or three times in a period of nine years? A. I think that is about all.

Q. Then your knowledge of Mr. Hartling is on an acquaintanceship

based on the two or three times you have met him in nine years, and the knowledge of Mr. Fitzgerald? A. Yes, sir; and others.

Q. Mr. Fitzgerald is the only one you can swear to, is it not? A. In a general way; yes, sir.

Q. When did you speak to Mr. Fitzgerald? A. The first time he spoke to me about him was several years ago.

Q. And when since several years ago have you spoken to Mr. Fitzgerald? A. About three days ago.

Q. About three days ago? A. Yes, sir.

Q. Who told you to go to Mr. Fitzgerald? A. No one.

Q. Did Mr. Fitzgerald ask you to come here to be a witness? A. He did not.

Q. Who did? A. I was subpœnaed by the Sergeant-at-Arms.

Q. Do you know who gave your address to the Sergeant-at-Arms? A. I do not.

Q. Do you know who gave your name to him? A. I do not.

Q. Do you know Senator French? A. I do; yes, sir.

Q. Do you know Senator Bunkers? A. Never saw the man in my life.

Q. Have you seen Senator French in the last three or four days? A. I saw him to night, sitting in the hall.

Q. Did he go to see you in San Francisco? A. He did not.

Q. Did you go to see Mr. Fitzgerald or did he come to see you? A. I happened to meet him casually.

Q. You happened to meet him casually? A. Yes, sir.

Q. Did he ask you to be a witness here? A. He did not. He did not ask me anything about my being a witness.

Q. Then if you only had met Mr. Hartling three times in nine years, and Mr. Fitzgerald is the only one you can remember who spoke to you about him, how do you suppose that the defense knew how to subpœna you? A. I do not suppose anything about it. I take things as they come. I was subpœnaed, and who subpœnaed me, and why—they may have had some knowledge; I may have spoken about it in public.

Q. Did you tell anybody other than Mr. Fitzgerald in the past week that you knew Mr. Hartling's reputation? A. Since this thing happened, I have heard Mr. Hartling's reputation discussed a great deal.

Q. You say you cannot testify to anybody that did it. Have you discussed it with any particular person, in which you said that you knew his reputation? A. Not anybody in particular, no; I have not with anybody in relation to this case that I know of.

Q. How long have you known Senator French, the accused? A. I have known him since—when he was in the County Clerk's office; that is all—just introduced to him.

Q. You are particularly friendly to him? A. No, not particularly friendly; just in his district and belong to the same party, and that way.

Q. Are you engaged in politics together? A. No; not particularly engaged in politics. I am a Republican and he is a Republican, that is all—different districts.

Q. Aside from Mr. Fitzgerald, who spoke to you about Mr. Hartling, having yourself seen him and spoken to him three times in nine years, you can give no reason why you should be brought here as an expert on his character, can you? A. I say I have heard his character discussed and heard his reputation discussed.

Q. But you don't know by whom? A. No one in particular, but generally people that you meet—persons that you meet and associate with.

Q. You do not know anybody other than that and yourself? A. Not particularly; no.

THE CHAIRMAN: Q. Do you know Mr. Joseph Jordan? A. Yes, sir.

Q. How long have you known him? A. About twenty years.

Q. Did he speak to you about being a witness here? A. He did not; no, sir.

Q. Have you been very friendly with Mr. Jordan during the last twenty years? A. I have known him very well indeed; yes.

MR. McNAB: That is all.

MR. CATOR: Q. Have you seen Mr. Jordan since this controversy commenced? A. Yes, sir.

Q. Where? A. I saw him on the train to-day.

Q. You were subpoenaed before that? A. I was subpoenaed before that.

Q. Had you seen him prior to that time since this controversy. A. No, sir.

Q. How long is it, the last time you saw him, prior to to-day? A. I think it was about two days before Christmas.

Q. Since that time you have not seen him until to-day? A. No, sir.

Q. Never spoke to you about being subpoenaed as a witness? A. No, sir.

Q. Did anybody from him, directly or indirectly? A. No, sir.

Q. Did he ever send you any message on the subject? A. No, sir.

Q. Did Senator French? A. No, sir.

Q. Or any one from him? A. No, sir.

Q. You say you go around a good deal in San Francisco? A. Yes, sir.

Q. And when this matter came up, and Hartling became a witness, it was then that he began to be discussed? A. Yes, sir.

Q. And you heard the matter discussed in many places? Yes, sir.

Q. Is it from that—in those many places was the opinion expressed about the same? A. Yes, sir.

Q. Regardless of who the people were? A. Yes, sir.

Q. And you did not know who they were particularly? A. No.

Q. Was the expression always about the same? A. Yes, sir.

Q. In regard to it? A. The general tenor of it was the same.

Q. And that was bad, eh? A. Yes, sir.

Q. That they would not believe him? A. Yes, sir.

MR. CATOR: That is all.

MR. McNAB: Q. You do not know the character of the people that expressed this sentiment? A. Well, they are people that I associated with, and I do not associate with anybody except that I consider—

A. (Interrupting.) I do not say that I associate with Senator French; I said I knew him.

Q. You regard him as one of your acquaintances and whom you associate with? A. I regard him as one of my acquaintances; yes, sir.

MR. JACOBS: I think these questions are uncalled for.

MR. McNAB: There is one question I omitted to ask Mr. Gray. I would like to have him recalled.

THE CHAIRMAN: The Sergeant-at-Arms says Mr. Gray has gone home.

MR. McNAB: I would like to have Mr. Gray prevented from going back to San Francisco.

THE CHAIRMAN: Would you like to have him recalled?

MR. McNAB: I would like to have him recalled.

MR. CATOR: Maybe we will admit what you want.

MR. McNAB: Will you admit he was convicted of a felony twice?

MR. CATOR: I will admit that he shot a man.

MR. JACOBS: A newspaper man.

MR. CATOR: And was acquitted.

MR. McNAB: Convicted twice.

MR. CATOR: I do not know how many times he was convicted. He was acquitted.

MR. McNAB: He was convicted.

MR. CATOR: I do not think you want to hurt a man's feelings after all these years.

MR. McNAB: I just want to identify the man.

MR. CATOR: Yes, sir; he is the same man that did it.

TESTIMONY OF C. O. NICHOLS.

Sworn.

MR. CATOR: Q. Mr. Nichols, where do you reside? A. My home is San Francisco.

Q. What is your occupation? A. Conductor on the Southern Pacific.

Q. Southern Pacific Railroad? A. Yes, sir.

Q. Where is your run? A. From San José to Salinas.

Q. Do you know Mr. Tichenor? A. Yes, sir.

Q. How long have you known him? A. In 1900 I made his acquaintance.

Q. Did he reside at any time in Oakland? A. He did at that time. I understood so.

Q. Do you know his general reputation for truth and veracity, honesty and integrity? A. Yes, sir; I have heard of it.

Q. Is it good or bad? A. Very bad.

MR. GOULD: Q. What is the answer you made there? A. I knew it.

Q. You heard of it? A. I have heard of it and know it.

MR. CATOR: It is about something people hear of. That is all the law admits.

Q. From what you know of his general reputation for truth and veracity and honesty and integrity, would you believe him under oath?

A. No, sir.

MR. CATOR: Take the witness.

Cross-Examination.

MR. GOULD: Did you ever run on the Santa Fé, between Bakersfield and Fresno? A. Yes, sir.

Q. How long were you on that run? A. Well, I was on that—I do not know exactly how long I was on that run, but I was on the Santa Fé four years.

Q. When was that? A. I went there in 1896 and left in 1900.

Q. Were you ever before the Conductor's Committee of the Santa Fé at the General Office in San Francisco—in Los Angeles, in reference to anything? A. I was one of the committee.

Q. Were you charged with anything? A. Yes, sir.

Q. Charged with stealing, were you not? A. Misappropriation, they called it.

Q. That is all. Did Mr. Nevins discharge you? A. No, sir.

Q. What became of you then—did you resign? A. No, sir.

Q. Did you continue working? A. No, sir; not at the Santa Fé.

Q. What did you do? A. I went to the Southern Pacific.

Q. You left the Santa Fé and went to the Southern Pacific? A. Yes, sir.

Q. Of your own accord? A. They did not furnish me with any more work.

Q. They did not furnish you with any more work, and the reason why they did not furnish you any more work was on account of misappropriation? A. No, sir; because Mr. Tichenor said I stole two dollars and a half, and I did not, and I was accused of it.

Q. Then the reason you testify that Mr. Tichenor's reputation is bad is because Tichenor says that you stole two and a half and the company discharged you? A. No; I have the affidavits that *he* stole the two and a half.

Q. I guess that will answer for you. Let me see the affidavits.

MR. CATOR: I object to their being seen unless they are put in evidence.

MR. GOULD: I have a right to see them.

MR. ALEXANDER: We will put them in evidence, then.

MR. GOULD: That is all.

MR. CATOR: Q. How did this controversy in regard to this two and a half, between you and Tichenor, arise? A. Mr. Tichenor was in Bakersfield and I had a fellow named Leese who was braking for me and a friend of Tichenor's, and he represented to Leese that he was about broke and wanted to get to Oakland, and Mr. Leese introduced him to me as an ex-railroad man seeking employment, and that he wanted to get to his home in Oakland, where he could get money; and I said to Mr. Leese if he was a railroad man and entitled to courtesy I would carry him, because I could not have anything to do with him unless he was a railroad man, and Leese vouched for him, and I carried him to Fresno, and when I got him there he and Leese told me that he paid me two and a half for the trip.

Q. And he charged that up to the company? A. He charged that up to the company.

Q. And he got the two and a half from them? A. I don't know; Mr. Leese told me that they would have to pay it.

Q. Did he ever pay you a cent? A. Never paid me a cent.

Q. And that two and a half, if he collected it, was money he embezzled? A. Money he embezzled; yes, sir.

Q. I show you some affidavits on that subject. Are those affidavits made by the parties that purport to have sworn to them there? A. Yes, sir; there is one of them from Leese, that introduced him; one of them from myself that I made under oath; one of them from the engineer that heard the conversation in Bakersfield; one of them from a passenger on the train that night that Mr. Tichenor tried to represent was the man that done the checking.

Q. Those affidavits that are sworn to show that your statement is true? A. Absolutely true.

MR. GOULD: I object to what the affidavits show.

MR. CATOR: I offer the affidavits in evidence.

MR. GOULD: Were these affidavits before the committee at the time of your investigation? A. They were.

Q. And the statements that you make in regard to this two and a half, you made before the committee? A. Yes, sir.

Q. All of the facts that you have testified to in relation to this controversy were in evidence before the General Superintendent of the Santa Fé at that time, and the committee? A. They were.

Q. And you were thereupon dismissed from the service? A. Yes, sir.

MR. GOULD: That is all. I have not any objection to the affidavits going in evidence.

MR. CATOR: I offer the affidavits in evidence.

THE CHAIRMAN: Any objection?

MR. McNAB: It seems to me it is encumbering the record.

MR. GOULD: These affidavits were used in the investigation, and the court that determined it convicted this man. The affidavits are simply an absurdity.

THE CHAIRMAN: What is the object of the affidavit?

MR. CATOR: To show that the statements he made are true.

MR. GOULD: That he wants a new trial before this Senate committee.

MR. McNAB: We object because it is encumbering the record.

MR. GOULD: Q. That was a committee of conductors, was it not?
A. These were made before a notary public.

Q. Your trial was held before a committee of conductors? A. Before the General Superintendent.

Q. With a committee of conductors? A. Yes, sir.

Q. And you were convicted?

THE CHAIRMAN: It seems that all these affidavits would go to show would be to prove the character of this witness, and it would be endless and you would have to bring witnesses here to prove the characters of witnesses all the time. I am not a lawyer, but it does not look to me as if it was common sense.

MR. CATOR: Then exclude them.

MR. SIMPSON: I would suggest that you would not vitiate your good judgment by the statement that you are not a lawyer.

THE CHAIRMAN: I want to impress that upon the committee.

MR. CATOR: I understood that outside of strict impeachment, the rules of evidence had not been adhered to.

THE CHAIRMAN: The committee will not accept them.

MR. CATOR: That is all.

MR. CROSS: Are the witnesses who have been examined excused?

THE CHAIRMAN: So far as the committee is concerned, you are excused.
Do you desire anything further from Mr. Cross?

MR. CATOR: I do not unless Mr. McNab would like to try a little more examination.

MR. McNAB: We are perfectly satisfied with Mr. Cross' examination.

MR. CATOR: Then you may go.

MR. McNAB: We are both satisfied.

THE CHAIRMAN: You may go.

MR. CATOR: Mr. Chairman, I have examined fifteen witnesses out of this limitation of twenty-five, in a very short time. You observe how long it will take to examine the remainder, and in view of the limitation placed upon us by the committee, I desire until the next session to examine the rest. Some of the witnesses have not arrived, and I could not do justice out of the remaining ten witnesses, because it is necessary that we should have time to know who these parties are, and we have occupied very short time, and it is very apparent that the other ten can

be examined in a very short time. We ask until the next session—say to-morrow, or whenever it goes on—to select from this list the remaining witnesses. As I say, we have nothing to offer that I know of, except the four Senators, and if the other side will examine their witnesses as fast as we have, we will get through in very short order.

THE CHAIRMAN: Mr. Cator, will to-morrow night at 8 o'clock suit you?

MR. CATOR: Yes, sir.

MR. McNAB: We had supposed, from the number of witnesses subpoenaed by the defendant, that we would not be reached until Wednesday, and our subpoenas have been issued for 8 o'clock Wednesday evening, supposing that all the intervening time would be occupied.

MR. RALSTON: I think it will be.

MR. CATOR: We will probably take up to-morrow evening with the other witnesses and the four Senators.

MR. GOULD: I desire to call the Senators' attention to one proposition here: If this character of testimony would be admissible, it would be merely as a matter of courtesy, I presume, because it is not in accordance with the strict rules of testimony; but one of these witnesses whom we have subpoenaed was about to depart for the East and is on his way there now, and the other is at his home on account of sickness. They are character witnesses in reference to George N. Tichenor, and they are George A. Knight and Leon Sloss of San Francisco. I would like to read their affidavits.

MR. CATOR: I object to it at present, seeing you would not allow affidavits to be read. You are not putting in your case at this time.

MR. GOULD: I will say it is possible, if we are not permitted to have this read, we will have one of these witnesses here. Mr. Sloss asked it as a courtesy of the other side. His family is sick, and his brother is away, so he is left practically alone.

MR. SIMPSON: I do not see, Mr. Chairman, how we can admit these affidavits over objection.

MR. CATOR: They have asked you to exclude affidavits. This offer is out of order at this time, any way, and when that is passed upon, it is when they are putting in their evidence; if they have not their witness present then, that will be the time to ask the committee if it will receive the affidavits or not.

THE CHAIRMAN: I think you better have Mr. Sloss here.

MR. McNAB: Of course, as far as Mr. Knight is concerned, he is out of the State. If Mr. Sloss comes here, can we take his testimony out of order. You would have no objection, Mr. Cator, to taking the testimony of Mr. Sloss out of order?

MR. CATOR: Not the slightest. Anything that the committee consents to, I am willing to do, but the mere offer of evidence at this time is out of order.

(Here it was moved and seconded that an adjournment be taken until to-morrow evening at 8 o'clock.)

THE CHAIRMAN: The Lieutenant-Governor was subpoenaed to be here to-night, and we forgot it that he was here. The committee will come to order. For the purpose of accommodating Lieutenant-Governor Anderson, who has to go to San Francisco, we will hear his testimony now.

MR. ANDERSON: I will say I was subpoenaed to be here to-night, and I have to go to San Francisco to-morrow, and will not be back for three days. It does not make any difference whether you want me or not.

TESTIMONY OF ALDEN ANDERSON.

Sworn.

MR. SIMPSON: Q. Governor, you were mentioned in the affidavit filed by William Corbin. You were not mentioned, but something was stated about the appointment of this Committee on Commissions and Retrenchment.

THE CHAIRMAN (reading): "That previous to the service on him of said subpoena, this affiant had been informed and believed that the creature and institution of such committee"—referring to the Committee on Commissions and Retrenchment; is that the proper name? A. Commissions and Retrenchment is the name of the committee as given it by the Committee on Rules.

Q. (Continuing reading.) "had been at the suggestion of the San Francisco 'Examiner'; that the suggestion had for its purpose the prosecution of Dr. Washington Dodge, Assessor of the City and County of San Francisco, and President of the Continental Building and Loan Association, who had given political offense to the 'Examiner,' and the persecution of this affiant.

"That after the appointment of said committee, four of the members thereof, to wit, Messrs. Bunkers, Emmons, Wright and French, appointed an agent to act for said four persons for the purpose of blackmailing certain corporations and collecting tribute from the same.

"That during the week ending January 21st, 1905, the said French and Bunkers, together with said agent"—the first part referring to the appointment of the committee by yourself—have you any statement that you desire to make concerning that?

A. I would prefer that you ask any questions.

Q. Is the statement in the affidavit true? A. Let me see the affidavit please.

(Affidavit handed to witness.)

Q. That first part? A. "That this affiant had been informed and believed that the creation and institution of such committee had been at the suggestion"—the creation of the committee was made by the Committee on Rules. The committees of the Senate at this session are exactly the same as they were at like ones, with the exception that there are two more committees: The Committee on Revenue and Taxation and the Committee on Buildings and Grounds—which is two more committees than those which were at previous sessions. The Committee on Rules provided for the committees to be appointed by the presiding officer of the Senate. As regards the appointment of the members on that committee, I will say that no man whomsoever ever asked to have anybody appointed on that committee.

Q. In making up your committees, Governor, what method did you

pursue? A. I had given no promise whatsoever to any Senator prior to coming to Sacramento. I had received a good many letters and a good many suggestions from Senators orally, but I told them that absolutely nothing would be done until we got to Sacramento. The first day that the session was called to order, I made the request from the President's stand that each Senator should write to me his preference of committee assignments, and pass them to me in my room upstairs. A great many of them did, and I used my judgment somewhat. I used the length of service in the Senate, their political affiliations, their occupation, everything in that nature, in determining what to my mind should be the proper appointments of committeemen.

Q. Did any Senator that you appointed on this Committee of Commissions and Retrenchment make a written request to be appointed on that committee? A. I had just one request in all that I received—written request—and it was from Senator Wright. I received a signed communication from him, signed on a slip of paper with eight requests, they numbered 1, 2, 3, 4, 5, 6, 7, 8, and then a line was drawn, and before that were three further enumerations, not mentioned: County Government; Irrigation; and the last of that, making the eleventh one which he had asked for, Commissions and Retrenchment, and that is the only written request that I had from anybody, or oral request, to go on that committee.

Q. That is, from any Senator? A. From anybody.

THE CHAIRMAN: Does anybody desire to ask any questions? Mr. Cator, do you desire to ask any question?

MR. CATOR: No, sir.

THE CHAIRMAN: Does anybody else?

MR. McNAB: Yes, sir; I would like to ask a few questions. Q. Mr. President, in making out your committees, it is your endeavor, I presume, to align the various Senators and various committees so as it will make an agreeable and harmonious arrangement of the Senate? A. Yes, sir.

Q. And to do that in a measure— A. (Interrupting.) At the same time, I reserve the right to do what I please—do what I think is right.

Q. Yes, you are the authority; but when some policy can be pursued, which policy you think is best, you prefer the point of least resistance? A. Absolutely so; yes, sir.

Q. It is natural in making out various committees, where you have no reason to anticipate anything inimicable to the public good, that you consult with members as to their preferences? A. I made requests to get the preferences; I did it for that purpose.

Q. And in doing that, you consult more or less with everybody? A. I invite suggestions.

Q. And you obtain, therefore, the collective suggestions of the Senate and its friends. This was not considered one of the very desirable committees, was it? A. No, sir.

Q. It had, at its inception, according to this detail, nothing to indicate the powers that it afterwards assumed? A. I understood that the original duties of the committee were to investigate State commissions, and find out what could be curtailed and abolished with benefit to the State.

Q. And afterwards, on motion of Senator French, other powers were attached to it, were they not? Was that correct? A. I beg your pardon.

Q. I say afterwards, on motion of Senator French, some additional powers were given to it? A. Yes, sir; on January 10th, I think, there was a resolution put in—they desired to prosecute some work; did not designate the work, and they were given powers by the Senate to further their work—powers were given them to issue subpoenas and summon persons and papers, etc., if I remember correctly.

Q. That, as you say, was considered one of the least desirable of the committees? A. Probably the least desirable.

Q. Therefore, if you had been in an embarrassment how to dispose of certain people who would not have fitted into some committee with the dignity and importance of it, and there had been a suggestion in regard to this committee, it would have been rather easy to have produced the membership of that committee—easier than any other; would it not, on account of its lack of importance? A. Probably so, but there was no suggestion whatever.

Q. Nothing of which you are conscious? A. There was none whatsoever; I am positive of that.

Q. Other than that of Mr. Wright? A. That was all. That was a written request.

Q. I say you had discussed the various committees with various people? A. The reason those men were put on that committee was because—that is, in all probability—I have to give each Senator a certain average assignment, and in making up the last few committees, there were some Senators who did not have their proper quota, and they were put on the balance of the committees.

Q. But when you were discussing with all the Senators in a friendly and agreeable way, as you say is customary, naturally there would be suggestions passing to and fro as to the disposition? A. Most all of them had preference right down. Probably ten of them wanted the same committee chairmanship.

Q. And without being conscious of it, could there not arise out of various suggestions that arose to and fro—and by the way, you do not remember all the suggestions that were ever made about any committee, do you? A. I made a memorandum of anything that was given to me of any importance. I had written requests of most of the Senators, and others I made my memoranda to use to make up the final adjustment.

Q. Supposing this to be the least desirable committee, and certain people with ulterior designs had sought to get the least important Senators on the least important committees; would it not be likely that they would find their natural atmosphere, and they would gravitate to it in consequence of it, as sediment goes to the bottom? A. No. The only kick I had from any of the Senators was from one of San Francisco—neither one of the four under investigation, but one who kicked because I did not give him one committee.

Q. That was not one of these four? A. No, sir. That was the only objection I had out of forty men.

Q. These four men who are under charges—they did not object to any committee? A. No, not to going along with the rest of them.

Q. You read the papers, President Anderson, on affairs of State? A. When I get time.

Q. You had seen the assumed ownership of the committee by one of the newspapers? A. No.

Q. You had not seen that assumed? A. No, sir.

Q. Did you see the papers to-day? A. Might have glanced at some of them.

Q. Did you see the assumed ownership of one of the committees by the chairman as set up by the "Examiner" to-day? A. No, sir.

MR. McNAB: That is all.

MR. NICOL: Will you permit me one question?

THE CHAIRMAN: Yes, sir.

MR. NICOL: Q. When did you as Governor ascertain that these gentlemen on this committee were attempting to investigate corporations transacting business in this State? A. I don't know as I knew anything particular about their doings until the time you came down the Senatorial aisle here with your affidavit.

Q. Was that the first information you had of it? A. I might have had general information. As I say, I have been very busy, and I do not probably read the papers as closely as I might. I might have had an idea of what they were doing, but nothing particular.

Q. I suppose it is the practice among the members of this body, in their relation with you as presiding officer, to communicate with you in a general way as to what they are doing? A. No.

Q. That is not the fact? I do not mean in detail, but I mean the general work of the committee that is going on? A. There was a report from that committee that came into the House, but it was not read.

Q. Were you conscious of any other than one report having been made by that committee? A. That is all I am conscious of. I am very busy. I have to sign every resolution besides signing each bill six times. I am not in the chair all the time.

Q. We know how busy you are, and that you cannot remember in detail what took place. A. I do not remember of but one that came while I was in the chair.

Q. Was there any reason that influenced you in selecting these particular Senators for a particular committee? A. No, except that that would be my reason for the appointment, that they did not have their average of committee assignments, and when it got down to the minor committees, those who did not have the average were put on those committees, because there was no demand whatever to be placed on those minor committees.

Q. You say that out of forty Senators in this body there was but one who made a written request for any appointment? A. That is on that committee.

Q. Was that Senator Wright? A. Yes, sir.

Q. Did he make any suggestion as to the appointment of anybody else? A. No, sir.

Q. That was only for himself? A. Yes, sir.

Q. Who was the clerk of that committee? A. Of their committee?

Q. Yes, sir. A. I do not know. The assignments are made by the Secretary of the Senate. I have nothing to do with it whatever.

Q. But you do know, as presiding officer of this body, that no report was made by this committee that was investigating excepting on one occasion. A. That is all I have knowledge of.

Q. How did it come to the knowledge of this body that this committee had engaged quarters remote from the Capitol? A. I never heard it until after the discussion.

Q. Do you know of any other committee appointed by yourself engag-

ing quarters remote from the Capitol to conduct its business in? A. No, sir.

Q. Do you know of any other committee holding night sessions and investigating men behind closed doors; do you know of any? A. No, sir.

Q. Were you ever informed of that until this investigation commenced? A. No, sir.

MR. NICOL: Personally, Governor, each of us here desires to acquit you of even the remotest suspicion that you were influenced even in the slightest degree, consciously, in the appointment of this committee, or any action you have performed as an officer, and we say that heartily.

MR. GOULD: So say we, all of us.

MR. McNAB: Yes, sir; we have all said that.

MR. RALSTON: Q. In regard to the request which you say was the only request made of you, by Senator Wright, and that was the eleventh, taking them in numerical order, your request to the Senators was that you wished them to write you what committee they wanted, and to put them numerically in the order that they preferred assignments? A. In the order of their preference.

Q. And that this was the last one? A. I have the statement if you want it.

MR. RALSTON: That is all.

THE CHAIRMAN: That is all.

THE CHAIRMAN: We would like to have Senator Coggins examined, in justice to the Senators and everybody else.

MR. JACOBS: Senator Selvage makes a statement in reference to the renting of this room on the outside that I think he ought to make to the committee at this time.

THE CHAIRMAN: Senator Selvage, do you desire to make a statement before the committee?

SENATOR SELVAGE: I have no statement to make. I simply have to say that the Sergeant-at-Arms found those rooms and assigned the committee to those rooms, and the Sergeant-at-Arms says he will so testify.

MR. JACOBS: Owing to a lack of rooms in the Capitol Building?

SENATOR SELVAGE: He assigned two or three committees outside, and he assigned this committee to that room.

MR. JACOBS: It was not a choice committee?

MR. SELVAGE: No, sir.

THE CHAIRMAN: Senator Coggins?

SENATOR COGGINS: I have no statement to make.

THE CHAIRMAN: I think the committee wants to question you.

TESTIMONY OF CLIFFORD COGGINS.

Sworn.

MR. SIMPSON: Q. You are a member of the Committee on Commissions and Retrenchments? A. I am.

Q. Did you attend the meetings of the committee regularly? A. The first meeting or two I was not there; there might have been one meeting.

Q. Were you present at a meeting in which it was decided to take up the investigation of building and loan associations? A. I think not.

Q. Will you state whether or not there was any rule made by the

committee at any evening you were present, with reference to holding its sessions with closed doors? A. Well, the first meeting or two that we had at which I was present, the doors were closed; that is, no one was allowed in the room except the men under investigation.

Q. Can you state in a general way what the purpose of that was?

A. The purpose of that was that parties who were summoned before the committee, in the event that they were doing a legitimate business, and were found to be doing that sort of business, it was not the desire of the committee for their names to be made public, because it would naturally tend to hurt their business.

Q. At that time, were there any parties present demanding or requesting hearing before the committee—at the time the rule was made?

A. I do not know of any one who was demanding to be heard.

Q. After that, there were meetings held that were not closed? A. Yes, sir; there were. When it was found that we had parties before the committee who were doing this get-rich-quick business—not doing a legitimate business—it was considered that the doors had better be open. At least there were a number of us suggested that, and Senator Emmons was perfectly willing to have the doors open. He was one who was willing; Senator Bauer was, and Senator Rambo.

MR. SIMPSON: I think that was all.

THE CHAIRMAN: Were the other members of the committee not willing? A. Not to any extent. It was thought best, I think, by one or two, probably, that the doors be closed, but I did not—I could not see any point why they wanted the doors closed.

Q. Did the other three Senators—Senators Bunkers, French, and Wright—want the doors closed; do you remember, or don't you? A. I do not remember that Senator Bunkers wanted the doors closed. I remember that Senator French thought it would be best to continue the investigation with closed doors, and I think Senator Wright said so, but from my understanding of their objections, it was to the effect that an open meeting—open doors—would tend to injure innocent parties who might be summoned before the committee. That was my understanding at the time.

MR. SIMPSON: Q. Do you know at whose instigation—at the instigation of what member of the committee—the investigations of these building and loan associations was taken up, Senator? A. I was not present at that meeting. I could not say.

THE CHAIRMAN: Any questions?

MR. NICOL: Q. Were you present, Senator, at a meeting of this committee held at the committee rooms on the 27th day of January? A. What day of the week was that?

Q. I am unable to tell you. Monday was the 30th, Sunday was the 29th; that would be Friday, I think. A. It was not on Friday, because I went south on the 26th, I think.

Q. Then you do not know what took place at that particular time? A. I do not know.

Q. Did you know the powers and duties of this committee when it first assembled? A. I was not aware what the powers were; no.

Q. Who suggested to this committee that it ought to proceed to call officers of corporations? A. I was not present at that meeting, at that suggestion.

Q. Do you know who defined the powers of that committee to that extent? A. I do not.

Q. Was any reason given to you for the withholding of the investigations? A. No, sir; none whatever.

Q. Did you ever make any effort to ascertain? A. I did not.

Q. When was that done? A. It must have been done at the meeting prior to what I attended.

Q. You did not conceive that the committee had any such duties as those? A. I should not undertake to do that; no, sir.

Q. In other words, you, appreciating the powers of the committee before that time, conceiving what the Senate could justly exercise, did not include with its powers any such duties as those? A. I would answer that by saying, although I had not much to say, I did object to summoning people there indiscriminately before the committee. I did not think that was the proper thing to do.

Q. That was made a matter of motion before the committee by you, was it not? A. No; I do not think there was any motion about that.

Q. Did not yourself and Senator Bauer, and—what is the other name, Rambo?—did not yourself, Senator Bauer, and Senator Rambo unite in protest to that proceeding? A. We did; yes, sir.

Q. Who voted against you on that? A. I think it did not come to a vote. I do not think it came to a vote.

Q. It was the subject of a somewhat heated discussion, was it not? A. Slightly heated; yes, sir.

Q. And on one side was yourself and your two fellow members of the minority, Rambo and Bauer? A. Yes, sir.

Q. And on the other were these four accused Senators? A. I think that Senator Emmons did not object to having open doors.

Q. Open doors for the Continental, was it not? A. I think so; yes, sir.

Q. And closed doors for all the others? A. No, sir.

Q. Who was it that moved that the Continental be called for investigation and examination before this committee? A. I do not think I was in that meeting.

Q. Did you hear it had been so called? A. I heard it; yes, sir.

Q. When did you learn it? A. About that day.

Q. Do you remember the day, Senator? A. I do not; no, sir; I do not remember the date. I think it was spoken of.

Q. But in connection with that matter, you do remember that Senator Emmons desired the Continental to be examined in an open session of the committee? A. Not in particular to the Continental; no, sir; I do not.

Q. What organizations were there examined before your committee? A. There was the Bardwell-Ford Syndicate.

Q. Was it examined in open session or secret? A. No; that was with closed doors.

Q. Who moved that it be examined with closed doors? A. That was the rule at that time.

Q. When was that rule declared? A. That was at a meeting before I was present.

Q. Then you have no personal knowledge of what took place at that particular meeting? A. No, I do not.

Q. Do you know who made the motion? A. I could not say.

Q. Do you know what reasons were given for it? A. No, I do not.

Q. Did you protest against it? A. I was not present to protest.

Q. When you learned, did you protest? A. I did not.

Q. Were you present at a meeting when Senator Bauer voiced a protest against any person being examined in secret, saying any honest man ought to be willing to talk about his affairs in public, and that the public has a legal right to know all about the corrupt affairs of dishonest men, and "I can see no object in haling men before this committee, and questioning them in secret session and letting them go. If we are to conduct investigations as a legislative committee, we ought to perform our duties in public or not perform them at all?" A. I was present.

Q. Did that provoke a discussion in the body of the committee? A. Not to any great extent; no, sir.

Q. Do you remember Senator Emmons becoming the spokesman of the majority of the committee on that occasion? A. Not any more than any of the others of the committee.

Q. Did he at that time say: "We have a right to investigate whenever and wherever and however we see fit, and I think it is a good thing to conduct examinations here as we have been conducting them—some of them in the open and some of them in secret"? A. I think there was a decision made of that kind—that some of the investigations should be had behind closed doors.

Q. Why? A. For the purpose of first ascertaining whether the parties were conducting their business all right, and next that if they were not, then the doors would be opened.

Q. How were they to determine whether they were conducting their business all right or not, until they had finished investigating them? A. The doors were to be closed, as I understand it now, until it was ascertained that they were not conducting a proper business.

Q. Did the majority of the committee vote for that proposition? A. I think they did.

Q. And the majority was who? A. I think Senator Emmons voted for it, Senator Rambo, Bauer, and myself.

Q. Did not Senator Emmons on that particular occasion become the spokesman of the majority of the committee, and did not he and Senator Wright and Senator French and Senator Bunkers vote down yourself and your two fellow men on the minority? A. I do not remember; I do not think there was any voting done on that proposition.

Q. If there was—— A. (Interrupting.) That is not my recollection.

Q. Who was to decide whether the investigation was to be public or private? A. I think Senator Emmons, with Bauer and Rambo and myself, decided that in case the parties before the committee established the fact that they were not doing a legitimate business, then it was decided that the doors should be opened.

Q. That is to say, after you had investigated—— A. (Interrupting.) Yes, sir.

Q. —for the purpose of investigation, the doors should be open? A. Yes, sir; the doors should be opened in case they were not doing a legitimate business.

Q. Did the committee agree to what extent you would pursue your investigation to ascertain whether or not they were doing a legitimate business? A. No, except to ascertain whether they were doing a legitimate business.

Q. At what stage did you or the committee agree it would decide they were or were not conducting a legitimate business? A. We had no case before us which came to such a stage as that that I remember of.

Q. How many did you examine? A. There was one young man—two young men here, that were before our committee, that I never did get the name of the business that they were conducting.

Q. Were you advised of it? A. They were before the committee.

Q. How long were they examined? A. Oh, probably a half an hour.

Q. Did that complete that investigation? A. I think the next evening completed the investigation.

Q. Why was not a report made to this body of that investigation? A. To this body?

Q. Yes. A. The report was not made on each evening's investigation.

Q. Was ever a report made of the acts of this committee, to this body, except one, that of the Bardwell-Ford Syndicate, as you remember it?

A. No other report made. I was not present.

Q. (Interrupting.) Why were not other acts of this committee reported to this Senate? A. I went away on the 26th, and any reports made after that I do not know anything about.

Q. Then it had been a matter of some considerable discussion in the business of this committee before this time, as to whether the business of the committee should be conducted behind closed doors or open session? A. That was the question.

Q. How did the complaints about corporations doing business in the State get before the committee? A. There were no complaints before the committee.

Q. How did they come to subpoena and hale before them certain men in this State? What acts did the committee take to reach out and bring this one before it? A. I do not remember of any committee meeting at which I was present deciding as to what corporations they should subpoena before the committee.

Q. Who sent out the subpoenas, and how did the subpoenas come to be sent out? A. I think that was decided on at the committee meeting at which I was not present.

Q. Were you ever informed of that? A. No, sir; I was not.

Q. Do you know whether other members of the minority were informed of that? A. I do not.

Q. Did you or your colleagues of the minority ever receive any information whatever as to who were going to be investigated until the investigation was on? A. I do not remember of any particular instance; no.

Q. Did Senator Emmons, or Senator Bunkers, or Senator French, or Senator Wright, ever discuss with you the advisability of subpoenaing the officers of the Continental? A. I believe there was some talk of that.

Q. Who mentioned that to you? A. I think it was talked of in the committee.

Q. Who mentioned that? A. Probably Senator French.

Q. What did he say? A. I could not state the words.

Q. How long before the subpoena was issued for Mr. Corbin? A. Well, I do not think I was present at the meeting when it was decided to subpoena Mr. Corbin.

Q. But you say that Senator French did mention the Continental first? A. No, not first. It must have been decided at a meeting when I was not there, about subpoenaing Mr. Corbin.

Q. Did you ever vote for the issuing of a subpoena for any person? A. No, sir; I never did.

Q. Did you know of anybody who was going to be subpœnaed, or when they were subpœnaed? A. I don't think I——

Q. (Interrupting.) Who arranged for the issuing of these subpœnas? A. I could not tell you.

Q. What ground or predicate was there for issuing subpœnas for people in the State, that you know of? A. I do not know of any.

Q. Were you conscious of any charges having been made against any persons who were subpœnaed? A. No, sir; I was not.

Q. Did you know Mr. Jordan? A. I knew him; yes, sir.

Q. Was he frequently about the committee? A. I don't think he was ever there.

Q. You never saw him there? A. No, sir.

Q. You never had any communication with him about any matter connected with the committee's duties? A. None whatever.

Q. About how soon after your organization did you commence the performance of your committee duties? A. Well, I could not give you the dates; the only way I could tell that would be from the minutes of the stenographer.

Q. Who was your clerk? A. This gentleman right here [indicating Reporter J. A. Vaughan].

Q. Mr. Vaughan? A. Yes, sir.

Q. Full minutes of all the proceedings were kept by Mr. Vaughan? A. During the time I was present.

Q. And Mr. Vaughan was the regularly appointed clerk of that committee? A. I believe so.

Q. I am glad to hear that. About how soon after the organization of the committee was the first investigation had? A. I think there was some investigation at a meeting at which I was not present.

Q. Do you know who that was? A. I do not know.

Q. Were you consulted about the issuance of the subpœna? A. I had notice to be there at that——

Q. (Interrupting.) My question was, were you consulted about the advisability of issuing subpœnas for a particular person? A. No, sir.

Q. How long after that was the next investigation had? A. Well, I could not give the dates.

Q. Were you consulted about the issuing of subpœnas for persons to attend that investigation? A. I think there was some talk in the committee as to who should be subpœnaed, at some of the meetings. It was not particular.

Q. Are you able to give us the names of those who were to be subpœnaed? A. No, I could not give you the names; I think the Continental was spoken of.

Q. How soon was that after the organization of this committee? A. Well, I think I attended the first meeting about the 23d or the 24th—somewheres along there.

Q. As a matter of fact, you as a member of this committee and as a member of this minority of gentlemen did not, at any time, take any action on your own motion for holding of secret sessions or issuing of subpœnas for officers of corporations, against whom no charges had been made by this committee? A. Not any motion of mine.

Q. I believe that is all, Senator. Just one minute. Were you ever conscious of any written complaint being made to that committee by any person upon which a subpoena was issued for any corporate officer? A. I never saw any written complaint.

Q. Did you ever hear of any? A. No; I do not think I did.

MR. CATOR: Q. Senator, was there not quite a good deal of printed complaints in the press in regard to the Continental? A. Oh, yes; yes, sir.

MR. McNAB: Q. All in one paper, was it not? A. Yes, sir.

MR. NICOL: Q. Was that the basis of the committee's action? A. I think it was.

Q. Was it so stated in the committee? A. I think it was.

Q. By Senator French? A. Yes, sir.

Q. United in by Senators Bunkers and Emmons? A. I think they took their cue from the "Examiner."

Q. And acted in accordance with its suggestions? A. I do not know about their acting that way.

Q. Is that the way it impressed you? A. It impressed me that they thought it best to conduct the investigation on account of the exposé in the "Examiner"; that is the way I was impressed.

MR. CATOR: Q. When you say upon the suggestion of the "Examiner," you mean what appeared in the columns of the "Examiner"? A. Yes, sir.

Q. Not on the suggestion of any of the owners or individuals. A. I could not say; no, sir.

MR. McNAB: Q. You do not know to the contrary? A. No, sir.

MR. McNAB: That is all.

MR. SIMPSON: Q. Senator, will you state anything that you know about your appointment on the Committee of Commissions and Retrenchment? A. In what way?

Q. Did you make a request to be put on this committee? A. No, sir; I did not.

MR. SIMPSON: That is all.

MR. McNAB: That is all.

MR. SIMPSON: Mr. Vaughan, did you take any notes of the proceedings of that committee?

MR. VAUGHAN: Yes, sir.

THE CHAIRMAN: The committee would like you to bring your notes at the next meeting.

MR. VAUGHAN: Very well.

MR. NICOL: We were about to prefer a request to you here, that Mr. Vaughan transcribe all those in the morning.

MR. ROWELL: Have you the notes transcribed?

MR. VAUGHAN: I have the notes of the testimony and proceedings in the Bardwell-Ford Syndicate transcribed, which transcript has been filed here with the Senate.

THE CHAIRMAN: What I mean is, the notes of the committee meetings.

MR. VAUGHAN: Not all of them.

MR. ROWELL: Have you the notes of the committee meetings?

THE CHAIRMAN: As clerk of the committee, did not you keep some record of what was going on at each meeting?

MR. VAUGHAN: Well, I took shorthand notes there of the testimony of the witnesses, exactly the same as I am doing here. Of course, there was a great deal of discussion had there in executive sessions, which Mr. Coggins probably remembers more about than I do, as I did not pay much attention to them, and those matters in executive session I did not make any note of.

THE CHAIRMAN: Bring whatever notes you have of the meetings of the committee with you.

MR. VAUGHAN: Very well, sir.

THE CHAIRMAN: Executive and otherwise. I do not mean the notes which you took in the investigation; I suppose those will appear in the report of the committee; but I mean in the transactions of the committee—the committee record.

MR. VAUGHAN: Very well, sir.

TESTIMONY OF HAMILTON BAUER.

Sworn.

MR. SIMPSON: Q. You were one of the members of the Committee on Commissions and Retrenchment? A. Yes, sir.

Q. Did you attend the meetings of the committee regularly? A. No. I was just looking at my book showing the calendar. The first meeting I attended as I remember was on Tuesday night.

MR. GOULD: Q. What day of the month? A. That was, I think, the 24th; on the 24th that was.

MR. SIMPSON: Q. Was there a full committee present at that time? A. With the exception of Senator Rambo.

Q. Will you state your recollection of what discussion was had and by whom, as to the holding of sessions under closed doors, and as to what the line of investigation would be? What case? A. Senator Simpson, in regard to meetings under closed door, I am to a certain extent unfamiliar with the earliest action of the committee. That was my own fault. I did not attend there, and consequently any motion that was made at those early meetings I know nothing of. My first attendance was Tuesday night, and the session was behind closed doors. I was put on the committee; I do not know why I was put on there; in fact, I made a big kick when I found my name was on there, because I did not think much of the committee. I went there. They told me that the Bardwell-Ford Syndicate was selling land on the Alviso Slough.

MR. SIMPSON: Q. What was the source of your information? A. Senators Coggins, and French, and Bunkers; and so I concluded I would go to the meeting and see what was going on. I went there Tuesday night, and they had some concern from the Columbian Building in San Francisco before them. They were selling bond certificates, and when I arrived there the Bardwell-Ford Syndicate investigation had been concluded and they had taken up this concern—I do not know the name of it, but some man named Harrison had his books there and spoke of this corporation that he was secretary of, and the next meeting I attended was Wednesday night. That was the night of the Governor's reception, and there were five of us there: Emmons, Wright, Bunkers, French, and myself. That night I had met Senator Coggins down at the hotel shortly before going out there, and he said to me: "What is the matter with having these sessions open?" and I says: "I believe that; I think that is a good idea," and that night I went out there. I did not say anything at the meeting. The Pacific Building and Loan Association was being investigated, and the secretary was there, and appeared to be a very frank man, and he showed his books and showed that the concern was very solvent.

MR. GOULD: Q. Pacific Coast, or Pacific States? A. That I cannot say. Mr. Vaughan can give the name of that. I think it was the Pacific States. Mr. Gunzenberger was secretary.

Q. Pacific States? A. After a little investigation, I objected to the proceedings on the ground that the concern was absolutely solvent, and did not see the use of proceeding any further. So there was considerable discussion there, and it finally wound up with Mr. Gunzenberger going away with his books, and he went away—had a whole trunkload of books there, and I went home after that. The next meeting was set for 2 o'clock, and I was told that evening that Mr. Corbin would be there the next day—he was subpoenaed. So at 2 o'clock I arrived, the next day, and the matter came up. We had a further meeting that day. The entire membership was there. I made a motion immediately on coming into the committee-room—I noticed Ed. Hamilton of the "Examiner" walk in, and shortly after him, Mr. Fisher of the "Bulletin" walked in, and they both sat down, and I thought if we were going to have an open meeting at one time we should have open meetings at all times, and so I made a motion right there and then that we would always have open meetings, and that all press representatives be entitled to attend, and that motion was met with a substitute by Wright that this particular meeting be open, and the question of the substitute was put; and then we got into a discussion as to the advisability of holding open or closed meetings, and I took the stand as was quoted here. That is just about the stand I took—not the exact words, but I thought that any honest concern should be willing to show its books in the open, and if it was not honest it should be shown up just the same in an open meeting. And Senator Emmons took the floor against me and made this point: He said that some good concerns were probably subpoenaed there; he did not know whether they were good or bad, but stated if they were good he did not want to do them any harm, but if they were bad they ought to be exposed, and that exposure should come through the committee's report; and the majority opinion seemed to be that way, and I withdrew that motion and made another motion, that hereafter, that following that day, that any investigation that would come before the committee, that first there should be a complaint filed. The charges in that complaint should be taken up by the entire committee and discussed, and the advisability of subpoenaing the company or the corporation should be taken up at the meeting. There was more discussion about that, and I finally withdrew the motion. It was never put to a vote, and that was the afternoon that Mr. Corbin was ordered arrested. I did not think we had the power under the resolution, and when we came into the Senate Chamber the next morning, I spoke against it. In fact I went into the Law Library and looked up some of the decisions, and I asked Judge Davis about it, and he quoted the case of Lawrence, and I came to the conclusion that we did not have authority to order Mr. Corbin arrested, and I took that ground on the floor of the Senate. That is about all I know.

MR. SIMPSON: Q. When did you ascertain it was the policy of the committee to enter into investigation of these building and loan associations? A. That was my objection on Thursday. I did not know anything about that. They told me that they had intended to subpoena at an earlier meeting which I did not attend, and that it was my own fault that I did not attend it.

Q. You did not attend an earlier meeting? A. Senator French stated I had not attended an earlier meeting of the committee, and that

was my own fault, but I made that motion, that hereafter charges be preferred and considered before any witnesses be subpoenaed.

Q. Were you present at any discussion or did you take part in any discussion in which the names of the corporations to be subpoenaed were discussed or ordered for attendance? A. No; I did not make one objection on Thursday at the open meeting then. I noticed in the "Examiner" that a realty company was to be subpoenaed, and that was the first intimation I had that they were to be there, and I desired to know why they should be subpoenaed and what the charges were, and who made the charges. I knew nothing about any subpoenas that were issued.

Q. And did not know what company would be subpoenaed, or what subpoenas would be issued? A. That was never put before any committee. That was my grounds——

Q. Never was discussed at any meeting which you attended?

A. No, sir; never was discussed at any meeting which I attended. I say I was partly at fault for not attending, of course.

Q. You know Joseph Jordan, do you? A. I know him pretty well.

Q. Was he present at any of the meetings?

A. He was not at any that I attended.

Q. How many did you attend? A. I attended Tuesday night, Wednesday night, and Thursday at 2 o'clock.

Q. Three meetings? A. Yes, sir.

Q. Do you know how often the committee met during that time? A. They met Wednesday night, when I attended. I don't know how often they met before that.

MR. NICOL. Q. You had nothing to do whatever, Senator, in formulating the policy of this committee? A. No, sir; none whatever.

Q. And the first time that you knew that it had construed its powers to the extent of conducting these investigations was at this first meeting you attended? A. Yes, sir; when they brought this company up.

Q. Were you surprised that they had such powers? A. At first I did not think much of it.

Q. You expressed surprise? A. Wednesday night, when Gunzenberger was there, I expressed surprise that such a company should be brought there.

Q. You had your views which you have stated were opposed by Senators French, Bunkers, Wright, and Emmons? A. Bunkers said absolutely nothing. He was chairman, and sat there.

Q. The others antagonized your view? A. Senator French did not agree with me, and Emmons took the stand that a good company should not be given out to the public that they were investigated—might injure them—but that a bad company should be given out.

Q. To that extent, he stood with the majority of the committee? A. Yes, sir.

Q. And the majority consisted of the Senators I have named? A. It was never put to a vote; those were the majority.

Q. In the expression of the views, those were the majority? A. Yes, sir.

Q. Were you ever consulted in the issuance of a subpoena? A. No, sir; I was never consulted in the issuance of any subpoena.

Q. Did you ever know a subpoena was issued? A. No, sir; I saw people there.

Q. You did not know who were to be investigated, on what they were to be investigated, and on whose complaint they were to be investigated?

A. Nothing whatsoever. Wednesday night, as I remember, Senator Emmons said that Thursday at 2 o'clock there would be a meeting of the committee for the investigation of the Continental through Mr. Corbin.

Q. Were you ever given any information before that time of a desire on the part of this committee to investigate the Continental? A. No, sir; I heard nothing of it.

Q. You met these Senators every day in the Senate here? A. Yes, sir; saw them every day.

Q. And at no time were you advised as to who was going to be investigated, how they were going to be investigated, or who was to be subpoenaed? A. No, sir. My objection was met by the fact on Wednesday and Thursday that I had not attended the early meetings, and therefore had no right to say anything.

Q. When you stated, as I read a while ago, to a protest in the way of an inquisitorial proceeding, did Senator French take issue with you and retort that he had heard that you had attempted to block the proceedings of the committee? A. No, sir; I had not, and when I got through I went down where I lived and retired.

Q. Had you ever known what the proceedings of the committee were? A. No, sir.

Q. Had you threatened to block them? A. None whatever. I talked to Senator Coggins, and the two of us concluded open meetings would be the best for the committee.

Q. On that occasion, when you voiced those objections to this committee's proceedings, you were met with a heated retort from Senator French that you had threatened to block the proceedings of the committee? A. Yes, sir; that is a fact.

Q. You demanded to know who had given him the information? A. Yes, sir.

Q. And you also stated that whoever had stated so was a falsifier? A. Yes, sir.

Q. Did Senator French take the floor and argue that the committee had a right to carry on the investigation as it was doing, and that he thought that the method of carrying on the investigation behind closed doors was a proper one? A. Yes, sir; with the statement I made.

Q. That is, after some person had been investigated, and they found it was a good concern, they ought to conceal it; but if they found it was a bad concern, they ought to open the doors? A. Yes, sir; and report back to the Senate.

Q. Then the openness that Senator Emmons was speaking of, was openness to the Senate? A. Yes, sir.

Q. That was the only openness he was in favor of? A. He argued in favor of the openness for any concern that was charged by the newspapers.

Q. Any concern that was spoken of as being charged by the newspapers, that ought to have an open investigation? A. I asked Thursday what was charged against the Continental, and he stated that the charge was spread broadcast throughout the State by the press.

Q. And he thought that ought to be an open investigation? A. He thought that particular investigation ought to be an open investigation.

MR. SIMPSON: Q. Was anything said that you remember about the Phoenix or Renters' Association? A. They were not mentioned at any meeting that I attended at all.

MR. NICOL: Q. Whether the persons who were to be investigated or the institutions that came up before this committee to be investigated—whether they were to be investigated in open or secret, that was determined by the majority of the committee? A. That was determined by the majority of the committee in advance of it.

Q. And you had no voice in it? A. I had no voice in it.

Q. And if you had, you would have objected to it? A. Yes, sir.

Q. And if you objected to it, you were overruled? A. It never came to a vote, because I saw I was beaten.

Q. You saw you were beaten? A. Yes, sir.

Q. Did you see you were beaten by these four I have named? A. Yes, sir.

Q. At this meeting, Senator, about which you have just spoken, were Senators Bunkers, Wright, French, and Emmons all there? A. All there; yes sir; they were at all the meetings I attended.

Q. That was on the 24th, also? A. The 24th was Tuesday night?

Q. Yes. A. Yes, sir.

Q. They were there on Wednesday night? A. They were there on Wednesday night.

Q. And on Thursday? A. And again on Thursday.

Q. Every time you appeared at that committee, you found those four gentlemen there? A. Yes, sir.

MR. NICOL: That is all.

TESTIMONY OF S. H. RAMBO.

Sworn.

MR. SIMPSON: Q. You were one of the members of the Committee on Commissions and Retrenchment? A. I am.

Q. Did you attend the meetings of the committee at 817 Tenth street regularly? A. No, sir.

Q. About how many meetings did you attend up until last Monday? A. I think I was there only twice.

Q. In a general way, state what occurred, what discussions were had at the committee meetings, and what action was taken. A. The first that I attended was the Bardwell-Ford Syndicate—examination of that. It was in progress when I arrived there, and they were holding that with closed doors. There was one of the parties that belonged to that company that I was acquainted with. I asked some of them: "Why do you close the doors on this?" They made the statement in this way: That they wanted to examine to a certain extent, and that if they thought there was anything in it they would be willing to open the doors, but if they seemed to be honorable and fair, they would make no report.

Q. Who outlined that policy; do you remember what member of the committee? A. I would not like to say. At the first meeting they had I was not there, and I think that rule was not adopted at that meeting.

Q. Did you hear any discussion as to what company was to be subpoenaed before the committee? A. No, sir. This company I speak about was there that evening.

Q. Do you know who selected that company for investigation? A. I do not.

Q. Do you know who determined what subpoenas were to issue? A. I do not.

Q. At the next meeting of the committee, what occurred? A. I was informed that Mr. Corbin would be there to give testimony on the Continental and requested to be there. When we got there we found that he was not there, and he was telephoned to, and he refused to come; and there was considerable argument at the meetings at that time in regard to holding open sessions or secret.

Q. Do you know how the committee lined up on that question? A. It never came to a vote.

Q. Well, from the expression of opinion of the members? A. I was of the opinion that four were in favor of secret sessions under certain circumstances, but not of the Continental.

Q. Do you know what four they were? A. It was Senators Bunkers, French, Wright, and Emmons.

Q. Do you know Joseph Jordan? A. I do not.

Q. Do you know him by sight? A. No, sir. If I could see him, I might possibly recognize him, but I do not know him as Joseph Jordan; never was introduced to him and never met the man that I now remember.

Q. You made no request to go on this committee? A. No, sir; I made no request to go on. I was a new member and left it to them to put me where they pleased.

MR. SIMPSON: That is all.

THE CHAIRMAN: Q. Were you in favor of holding these meetings with closed doors or open? A. I was in favor of holding them open, and I asked them: "Why are you holding them with closed doors?" and I made the remark—I stated: "This company you are investigating now, there is no reason of holding them in secret, because they are a fraud on the face of it. They showed it in every word from the start."

MR. RALSTON: Q. That was what name? A. The Bardwell-Ford Syndicate. One of the men I knew.

Q. You knew he was no good? A. Yes, sir, I did; I knew that personally.

THE CHAIRMAN: Have you any other questions?

MR. NICOL: Q. You had nothing to do whatever as to the policy of this committee, had you? A. No, sir.

Q. Had any person ever spoken to you as to defending the policy of the committee? A. Well, Senator Bunkers notified me that there would be a meeting on a certain evening, and I was not there. It was raining, and I had taken a little cold, and I did not go; and the next morning he met me and says: "You did not turn out last night," and I says, "No; I was not feeling well." He says, "We want you to attend the meetings."

Q. That is all you were advised of it? A. Yes, sir.

Q. You were not informed of the fact that this committee was engaged in the business of holding investigations? A. I talked the next day.

Q. At that time, whom did you talk with? A. I talked with Senator French more than any one.

Q. What did he say? A. He said it was for the purpose of investigating building and loan and kindred associations.

Q. Was that the first intimation you had that they were going to investigate building and loan associations? A. Yes, sir; the first time that I knew what the duties of that committee were.

Q. Did he tell you whom they were going to investigate? A. I think he mentioned several; one was the Continental. He seemed to have a grievance against the Continental personally in some transaction he had.

Q. He manifested considerable feeling in that? A. Yes, sir; seemed to have lost money.

Q. Seemed to be after the Continental? A. Yes, sir; seemed to have lost money in some deal he had with it, and did not feel very good over it.

Q. That was his pretext to you? A. He had knowledge——

MR. CATOR (interrupting): I do not think that is fair, that he had pretense.

MR. NICOL: It is a pretense, because he never had any business with the Continental whatever.

THE WITNESS: That I know nothing of.

MR. NICOL: There is no truth in his statement to excuse his conduct.

Q. Were you ever consulted in relation to issuing subpoenas? A. Not until on the day we were there and expected Mr. Corbin.

Q. And you were requested to call him up by 'phone? A. The request was made to call him. I think Senator Coggins said he wanted to talk to him.

Q. Were you ever advised of the issuance of subpoenas? A. No, sir.

Q. Up to that time? A. No, sir; I was not.

Q. When you met on this particular occasion, when this secret session was being held, and this fraudulent organization was under investigation, you objected to holding sessions behind closed doors? A. I made that point, that I did not see any necessity for holding sessions that way, and especially with such a company as that.

Q. Whom did you so express that to? A. Some of the members.

Q. Some of the four members? A. I would not say who it was to; I think it was to Senator Coggins.

Q. What was the reply? A. Senator Coggins was of the same opinion.

Q. Then Senator Coggins, Senator Bauer and yourself were of the same opinion? A. Senator Bauer was not there.

Q. Subsequently, he was there? A. Yes, sir.

Q. The four were against you; that was quite evident? A. From what they said.

Q. In other words, they were determined to conduct certain investigations in secret to a certain point? A. Certain investigations until they were satisfied that the investigation would enter into quite a lengthy one in regard to finding the evidence that they wanted—if it showed on an ordinary examination that everything was right, there would be no report made.

Q. That is, to the Senate? A. Yes, sir.

Q. That is to say, this committee was to engage in certain business, and with regard to what business they did, was to make no report to this Senate as to what they did; is that the idea? A. Yes, sir.

Q. And then when there was some institution which they thought it ought to be made public as against whom it was, that report was to be made to the Senate? A. I do not understand your question.

Q. I say when it was ascertained in an investigation that some par-

ticular institution was deemed by the committee to be fraudulent, as to that particular one, a report was to be made? A. Yes, sir; and the Continental had been so much before the public in the press in regard to their actions, that they made that as a point that it was public now, and they might as well go ahead and make the balance public of the investigation.

Q. This Bardwell concern that you say you knew to be a crooked concern—that was examined in secret, behind closed doors? A. Yes, sir. I did not know it was wrong until afterwards, except this one person. I do not care to mention names. I knew he could not enter into an honest affair.

Q. There was no open investigation of that, was there? A. No, sir.

Q. And the committee, in pursuance, then, of the policy as expressed by the majority, for the purpose of giving effect to the committee, filed that report? A. Yes, sir; I signed that report.

Q. Was that in pursuance of the policy that you thought this committee was to pursue, that when upon an investigation it was found that the institution examined was not what it ought to be, a report should be made? A. Yes, sir.

Q. But if the investigation disclosed it was one of these honesty concerns, nothing should be said about it at all? A. Well, in regard to that, I understood that if the proposition proved upon the start without a great deal of evidence that it was conducted honorably, that the thing would be dropped. That is the impression I got, but I got it not from anybody saying anything in that line.

Q. How did you get that impression? A. From general conversation, and the way things seemed to be coming.

Q. Conversation with whom? A. The committee.

Q. With whom? A. I would not say who.

Q. That was not your view? A. In fact I did not know the duties of the committee, but I thought if the thing was to be examined at all—

Q. (Interrupting.) Your own sense of propriety had suggested to you to have an open session? A. Yes, sir; if the thing was going to be investigated, you should not keep it secret.

Q. That suggestion did not come from you? A. What is that?

Q. As to withholding reports? A. No, sir.

Q. Did not come from Senator Bauer? A. I think not.

Q. Or from Senator Coggins? A. It did not come from me. Well, I would not say that anybody on the committee said words to that effect; but that was the impression that I formed.

MR. SIMPSON: Q. Was anything said at any of these meetings that you remember, about the Renters' or Phoenix Association? A. There was nothing said at any of these meetings about those. I think they were investigated one evening when I was not there.

THE CHAIRMAN: Anything further?

MR. NICOL: That is all.

MR. CATOR: Some of the witnesses who have testified to-night have come from a distance, and they have come to me and want to know what arrangements would be made as to the compensation they are entitled to for coming this long distance. I, of course, know nothing about that, or whether this committee has anything to do with that. I presume it rests with the Sergeant-at-Arms. Is it necessary that there should be any certificates of the committee at all?

THE CHAIRMAN: I do not know that it is. I suppose when the witnesses have testified that they will file their expenses with the Sergeant-at-Arms, or something of that kind. I do not know exactly the method of procedure myself.

MR. CATOR: Then we will find out about that.

THE CHAIRMAN: The witnesses who have been subpoenaed and have not been examined tonight, and those who have been examined tonight and have not been expressly excused—

MR. CATOR: They are to remain.

THE CHAIRMAN: They are to remain. Those who have been examined, do you want them?

MR. McNAB: We do not.

(Here the names of witnesses were called who had already testified.)

THE CHAIRMAN: It is understood that those witnesses who have been named will be excused.

MR. CATOR: Yes, sir; all those who have testified.

THE CHAIRMAN: The committee would like to have Mr. Corbin here tomorrow or Wednesday night. When would it suit your convenience?

MR. McNAB: At your convenience.

THE CHAIRMAN: Suppose we put it for Wednesday night.

MR. GOULD: We will probably have a number of witnesses from abroad then.

MR. CHAIRMAN: You can have him here Wednesday night?

MR. GOULD: Yes, sir.

(On motion duly made and seconded an adjournment was taken until to-morrow night, Tuesday, February 7, 1905, at 8 o'clock.)

SEVENTH SESSION.

TUESDAY, February 7, 1905, 8 P. M.

THE CHAIRMAN: The committee will be in order, please. Senator Diggs is indisposed and he asks to be excused from the committee meeting to-night. If there is no objection he will be excused from the committee. He is confined to his room. Mr. Cator, do you desire to proceed now?

MR. CATOR: I am ready to proceed if such is the order of the committee and unless it has some other order to make.

MR. McNAB: I would like, with the consent of the committee and the counsel of the other side, to call one character witness who happens to be going through Sacramento on a matter of business. He was subpoenaed for to-morrow evening, and it would be a great convenience to Mr. Wehe if he could be called at this time.

THE CHAIRMAN: Is there any objection?

MR. CATOR: No objection.

THE CHAIRMAN: Call Mr. Wehe.

TESTIMONY OF FRANK R. WEHE.

Sworn.

MR. McNAB: Q. Where do you reside? A. I now live in Berkeley.

Q. What is your occupation? A. Attorney at law.

Q. Where was your residence prior to your adopting a residence in Berkeley? A. Up to two years ago I lived in Downieville, Sierra county.

Q. How long had you lived there? A. With the exception of five years, from 1872 to 1877, I lived there forty-eight years.

Q. What was your occupation in Sierra County? A. I practiced law there for fifteen years, ten years of which I was District Attorney.

Q. You were for ten years District Attorney for Sierra County? A. Yes, sir.

Q. When? A. From 1890 to 1902—1892 to 1902.

Q. Did you ever hold any other official position in Sierra County?

A. Well I was on the Board of School Trustees of Downieville District for eighteen years, and held other small positions there.

Q. Did you know Mr. Hartling during the time you were in Sierra County? A. Well, he lived there some time in—about fifteen years ago he left there, but I have been intimately acquainted with him for about forty years.

Q. That covered the period of his residence in Sierra County, did it not? A. All of it. We were both born in the town of Downieville, the same year, I believe.

Q. How intimate was your acquaintance with Mr. Hartling? A. Well, we roomed in the same cabin; lived in the same cabin for three years, and were schoolmates—well, all sorts of mates; boys together.

Q. Did he ever occupy any official position in any part of Sierra County? A. He was Constable of Forest Township, I think, for one or two terms.

Q. Did you know then and do you know now the reputation of Mr. Hartling for truth, honesty, and integrity? A. I did; yes, sir.

Q. Do you know now? A. Yes, sir—that is, in that county.

Q. What was his reputation?

MR. JACOBS: Just a moment, please. Q. Did I understand you to say that you were an attorney at law? A. Yes, sir.

MR. JACOBS: Very well, I withdraw the objection then.

MR. McNAB: You knew his reputation during the time that he was in Sierra County for truth, veracity, honesty, and integrity? A. Yes, sir.

Q. What was his reputation? A. So far as I know, it was good.

Q. How large a place was Forest City in the matter of population, approximately—the township where he was elected Constable? A. Well, the township where he was elected Constable in had, Pike's City, that cast about 40 votes, I suppose 150 or 200 people there; Allegheny, a little larger place than Forest City, and I think American Hill at that time. There were four or five precincts—perhaps—oh, 1,500 people.

Q. And he was twice— A. (Interrupting.) Well, from 1,000 to 1,500 people.

Q. And he was for two terms elected Constable? A. I think so. I only remember distinctly one term.

Q. Did you know Mr. Cross, the lawyer, at that time. A. I knew him very well.

Q. C. W. Cross. A. Yes, sir.

Q. Was he a resident of that county at that time? A. No; he was a resident of the City of Nevada, in Nevada County.

Q. He never was a resident during that period of Sierra County, was he? A. Well, he never—I would not—I don't think he ever voted in the county. He had some mining interests in Sierra County and owned a mine near Downieville, and one summer I recollect was more or less in Downieville. He practiced law there all the time.

Q. Do you remember a case tried in Downieville called the Arroni case? A. Yes, sir.

Q. Was or was not that a case that created a great deal of feeling in Sierra County? A. A great deal of feeling; the people of the county took sides in the case, more so than in any other case I have known there.

Q. The community was very much divided? A. Very much divided.

Q. And the controversy between the divisions was quite bitter, was it not? A. Yes, sir.

Q. Did you participate in the trial of that case as an attorney? A. No, sir; not until after the trial.

Q. Did you take part in the motion for a new trial? A. I took part in the motion for a new trial after the conviction of Arroni. I beg your pardon; I was a witness in the first trial; I was one of the witnesses.

Q. Mr. Hartling, as Constable, prosecuted in that murder case, did he not? A. Yes, sir; he was a detective in the case.

Q. And there was a great deal of feeling over the conviction, I believe, on the part of the friends of Arroni? A. Yes, sir. It was a case where the friends of Arroni claimed that the man whom the prosecution claimed was murdered, they claimed he committed suicide. The side of the prosecution claimed that he was murdered, and the people were divided on that point.

Q. The verdict was—— A. At the first trial—that was eighteen years ago—more than that, and I don't want to be sure about it, but my recollection was that at the first trial the jury disagreed, and then there was a second trial, and the whole jury agreed upon a verdict of murder in the first degree without any recommendation.

Q. That meant the death penalty? A. Yes, sir.

Q. Mr. Hartling was a witness for the prosecution on any occasion? A. Yes, sir.

Mr. McNAB: Take the witness.

Cross-Examination.

MR. CATOR: Q. Was that conviction reversed? A. No.

Q. After judgment? A. Well not reversed exactly.

Q. Was there a new trial granted? A. There was a motion for a new trial made before Judge Soward, who was then presiding judge, Superior Judge, and who granted the motion on the ground of the insufficiency of the evidence, and the District Attorney then dismissed the case.

Q. Is it not a fact that in the Arroni case that after the Coroner's inquest had found a verdict of suicide, that the father-in-law or some relative brought forward a policy of insurance which was avoided by the theory of suicide, and that it was claimed afterwards what the theory of murder was said to be in order to enable them to recover the money on the policy of insurance. Did you ever hear that? A. Now I don't

want to commit myself to saying that the Coroner's jury found a verdict of suicide. The general impression of the friends of Arroni was that it was a suicide, and I was one of the people that believed that it was a suicide, and there was a policy of insurance that suicide would void.

Q. Afterwards, was there not a suit brought on the insurance policy?

A. That I cannot say. I think so, but I would not want to testify to that.

Q. Did not the bitterness that grew out of it, as you understand, have relation to the fact that those who claimed that it was suicide claimed that the charge of murder was got up in order to recover on the policy of insurance? A. Well, now, I would not want to charge that against any of the people there.

Q. Was that not bruited about so there was a great deal of talk of that kind? A. There was some talk of that kind, but I don't think that those who supported the suicide theory as a rule—the good citizens there—claimed that the prosecution was governed by any such motives as that.

Q. I don't say how far they charged the final prosecution with being governed by motives of that kind, but was it not claimed that back of the prosecution there were those desiring to recover on the policy of insurance? Did they do something as individuals to instigate the charge of murder. A. Well, the husband, or the man whom they claimed was murdered was a mining superintendent, and he had a large policy on his risk in some insurance company—I think an Australian insurance company—and the family to whom the policy was to be paid or the money due on the policy wanted to collect that policy. There is no question about that, and there were some people that charged that they raised the cry of murder for the purpose of collecting that policy. That is the truth of that.

Q. Do you know anything about the part that Mr. Hartling took as a detective or witness in that affair? A. I was present at both trials and heard him testify, but that was all. I could not say —

Q. (Interrupting.) Did he testify that he testified at the Coroner's inquest? A. Well, that is not my recollection of it. My recollection of it was that the dispute in his testimony was that he had told at one time one story and testified to another at the trial. But my recollection of it is that he did not pretend to say that he had not told this story before. I don't think he testified to it.

Q. It was claimed, was it not, that he told one story on one occasion and another on another? A. Not under oath.

Q. When? A. Not under oath. There was no charge that he had testified differently under oath.

Q. Was it not charged that he first had testified or had taken the ground in favor of the company, who thought it was suicide? A. Well, I don't know. I think that my period was the one over which the dispute arose, and I think that my recollection is that I went to Forest City and we had some discussion about the suicide theory, and I claimed that he had agreed with me. It was about the pistol, and I have forgotten about whether it was that the pistol was loaded or unloaded.

Q. Was it not claimed that he testified on one occasion that the chamber was discharged, and at the other trial he testified that it was not? A. No. I don't think there was ever any claim that he testified that it was discharged once, and next time not discharged or unloaded.

I think the claim was that he told some parties before the trial that it was either loaded or unloaded, and then testified at the trial differently. My recollection is that he did not dispute, but what he said that he claimed it was none of their business or something like that.

Q. Out of that did there not grow the sentiment by which it was claimed by some, at least, that he lacked character for truth and veracity? A. I don't think that it went to that extent. I think that the people who were for the suicide theory—that those who were radical about it and unreasonable about it—went to the extent of claiming that he swore falsely.

Q. Those who believed in the suicide theory did go to that extent? A. Yes, sir; I believed in the suicide theory, but I did not believe that he testified willfully falsely.

Q. You say you have practiced law in that— A. (Interrupting.) While I practiced law actually by myself from 1889 to 1902, prior to that time I was nominally the partner of Judge Van Fleet, but really his clerk.

Q. Were you practicing law at that time? A. At the time of this trial?

Q. Yes, sir. A. Yes, sir; as I said, I was clerk in Judge Van Fleet's office.

Q. You were a clerk? A. Yes, sir; my name was on the sign as his partner, but I did not pretend to be a practitioner.

Q. Did you leave there before Mr. Hartling did? A. No. Hartling left somewhere about 1890 or 1889, along there, and I left in 1902.

Q. When did this trial take place—this last? A. Well, somewhere about—well, between '85 and '90; somewhere along there.

Q. The last part of it; the final conclusion of it was not through until 1890? A. Well, I can get at that. Judge Van Fleet went on the Supreme Court Commission in 1889. Now it was before that time.

Q. Mr. Hartling left there about 1889, you think? A. Well, shortly after that trial; one year or two after that.

Q. You knew Senator Cross, you say? A. Knew him very well indeed.

Q. And he practiced law largely at Downieville? A. Not largely. He used to come there and try cases. I tried cases with him and against him.

Q. He was State Senator from that district in this Senate? A. He was State Senator from Nevada County. That was a district at that time. I will say possibly there was some other county. Sierra was not in the district.

MR. GOULD: Q. That was before the Stockton convention, was it not? A. Yes, sir; I think so.

MR. CATOR: Q. Senator Cross bore a good reputation in that community, did he not? A. In so far as I know; I considered him a very good lawyer.

Q. Did you know anything about the—was Hartling a detective at that time; did he hold himself out to be engaged in that kind of work? A. Now, sir, I don't know whether you are familiar with country practices.

Q. Yes, sir; I was born and brought up in the country, back in the backwoods. A. In country practice, the Constable of the township is the detective charged. Whenever there is anything happens in that township he is supposed to get out and work for the prosecution, and work up the case for the prosecution. They do not call him a detective there; they call him the Constable, and that is one of his duties. He is one of the prosecuting officers of the county.

Q. Prior to his having been elected Constable he had not been a detective? A. Prior to his being Constable—I don't know whether he was elected Constable as soon as he went to Forest City or not, but as long as he lived in Downieville, as a man, he was a printer and worked for the Downieville "Messenger," the principal county paper. He was compositor on the paper, and I think he was the job printer of the office.

Q. Since the time that he took up the business of being detective as County Constable there, you understand he has followed it up more or less, don't you? A. My understanding now is that he is a professional detective, and has been for some years.

Q. Was the civil case in regard to the policy ever tried? A. I think not, but I am not sure of it. I think that upon this verdict they paid the policy.

Q. Was it not charged there that Hartling was employed by parties who were interested in securing the money of the policy? A. No, sir; not to my recollection.

Q. Never heard of that? A. I never heard that in my life.

MR. CATOR: That is all.

MR. McNAB: Q. There never was a verdict of acquittal at any time in the Arroni case, was there? A. No, sir; there was not, I am satisfied of that.

MR. McNAB: That is all.

THE CHAIRMAN: Does any member of the committee desire to ask Mr. Wehe any question?

MR. NICOL: Mr. Wehe, there is one question we would like to ask you.

MR. McNAB: Q. You have been acquainted with Mr. Hartling ever since, have you not? A. Oh, I have seen him; I have been intimately acquainted with him ever since we were old enough to be acquainted with each other.

Q. In San Francisco? A. San Francisco, too.

MR. McNAB: That is all. A. I am now.

THE CHAIRMAN: Have you any further witness, Mr. McNab?

MR. McNAB: No, sir. This witness was put on simply as a matter of convenience and courtesy.

THE CHAIRMAN: Mr. Cator.

MR. CATOR: I would like to recall Mr. Nichols a moment. He was on the stand last night.

TESTIMONY OF C. O. NICHOLS.

Recalled.

MR. CATOR: Q. You have been sworn, Mr. Nichols. Take your seat. Last evening in your testimony I did not quite understand what was meant by an expression used here in regard to the conductors' meeting. Was it in Santa Barbara or some southern place? A. Los Angeles.

Q. You say that that was the place where this matter in regard to those two dollars and a half which you say Mr. Tichenor stole, and which he charged was misappropriated, was brought— A. (Interrupting.) Yes, sir.

Q. What was the nature of that meeting, or was it called a conduct-

ors' meeting? A. There is an affiliation of the Committee of Conductors' organized called the O. R. C., Order of Railroad Conductors.

Q. Division? A. Representatives of division.

Q. Representative of the division meeting? A. Yes, sir.

Q. There was a charge pending on this subject? A. Yes, sir.

Q. Made through Mr. Tichenor? A. Yes, sir.

Q. Did the Division Superintendent preside? A. No, sir; the General Superintendent.

Q. He was there? A. Yes, sir.

Q. Did the meeting of conductors have any power to decide anything definite in regard to it? A. None at all.

Q. They discussed the matter? A. Yes, sir.

Q. What was their function in the matter? A. Argument—debate.

Q. Was there any decision arrived at there, or was it merely suspended judgment or decision on the matter? A. I was suspended, and the decision as far as I know has never been made yet.

Q. Did the Superintendent give you a letter? A. He gave me a letter—the Division Superintendent.

Q. He gave you a letter at the time? A. Yes, sir.

Q. And what did you do with the letter? A. It is on file with the Southern Pacific at their general office.

Q. You took it to the Southern Pacific and got another job? A. Got another position.

Q. On the strength of that letter? A. I suppose, and a recommendation.

Q. And your fitness for the position? A. Yes, sir.

Q. And you have occupied that ever since? A. I have been in the employ ever since.

Q. Have you heard anything said in regard to reinstatement if you want it in the Santa Fe. A. I have heard it, not officially but otherwise, that I could be reinstated.

Q. You had a better job there? A. Yes, sir. I heard that Mr. Wells made the remark that he would rather not employ me because on account I had a better position than he could give me.

Q. Do I understand you to say that this Mr. Leese asked you to allow this man to ride on the ground that he was a railroad man. A. Yes, sir.

MR. GOULD: I supposed that that had already been gone over.

MR. CATOR: Q. And he never gave you any money at all? A. None at all.

Q. Charge up as \$2.50? A. Yes, sir.

Cross-Examination.

MR. GOULD: Q. You did not get a letter from the superintendent who presided at that meeting? A. No, sir.

Q. Are you a freight or passenger conductor? A. Freight conductor.

MR. GOULD: That is all.

MR. JACOBS: I have been informed that Mr. Nichols has been subpoenaed here by the prosecution.

MR. McNAB: We did not subpoena him.

MR. CATOR: He thinks he was subpoenaed by you.

MR. GOULD: He is laboring under another false impression.

THE CHAIRMAN: Another subpoena was issued to-day for Mr. Nichols at your request.

MR. CATOR: Then Mr. Nichols, so far as your side is concerned, is excused.

MR. McNAB: Yes, sir; he has testified on both the subpoenas that have been issued.

MR. CATOR: Clarence Gray.

MR. SIMPSON: Recalled?

MR. CATOR: I deem it only just. After he had left the stand and left the room, I admitted here that he had killed a man, and he desires to speak of it himself. I think where such a charge is made, counsel can not speak of that as a matter of admission and preclude the man from——

MR. McNAB (interrupting): We have no objection to his being recalled.

MR. CATOR: The doors are shut, and I presume a number of our witnesses are barred out. I will call his name and at the same time ask to call W. A. Mackenzie and W. H. Daley.

TESTIMONY OF W. H. DALEY.

Sworn.

MR. CATOR: I would like to have Bert Schlesinger, and I would like to know if he is here.

THE CHAIRMAN: Bert Schlesinger will be up to-morrow. I received a telephone message that he was quite ill, and that he would be up to-morrow.

MR. CATOR: Yes, sir; he lost his wife three or four days ago, poor fellow.

MR. CATOR: Q. Mr. Daley, where do you reside? A. San Francisco.

Q. How long have you lived there? A. Thirty-two years.

Q. How old are you? A. Thirty-four years old.

Q. What is your occupation? A. Bookkeeper.

Q. Do you know the general reputation of a man named Henry Hartling? A. I know of it; yes, sir.

Q. Do you know the general reputation of Henry Hartling for truth and veracity, honesty and integrity? A. I do.

Q. Is it good or bad? A. It is bad.

Q. From what you know of it, would you believe him under oath? A. I would not.

MR. CATOR: I think that you may examine the witness.

Cross-Examination.

MR. McNAB: Q. Do you know Henry Hartling? A. I do not know him personally; no.

Q. Never saw him? A. I saw the gentleman.

Q. When? A. I saw him many times.

Q. When? A. Well, the last time I saw him may be six or seven years ago.

Q. Six or seven years ago was the last time you saw him? A. Yes, sir.

Q. Where? A. Turk and Taylor streets.

Q. You have not seen him since? A. No.

Q. Was it seven years ago that you were talking about him? A. No, very recently.

Q. Since this affair came up? A. Yes, sir.

Q. Who suggested to you that you should talk about Mr. Henry Hartling? A. Nobody.

Q. Where were you last talking about the reputation of Henry Hartling? A. Through the papers.

Q. Were you talking through the papers about Henry Hartling? A. Yes, sir.

Q. You were? A. Not me; no, the general public.

Q. The general public was talking through the papers? A. Yes, sir.

Q. And that was the information you received, was it not? A. No.

Q. It was not? A. No.

Q. Well, seven years ago, you say, you saw him? A. Yes, sir.

Q. That was the last time you saw him? A. To the best of my knowledge.

Q. You are testifying with some knowledge are you not? A. Yes, sir.

Q. Taking this seven-year-old knowledge that you have, how long before that seven-year-old knowledge was the last time that you saw Henry Hartling? Had you seen him previously? A. Put the question again, please.

Q. I say, talking about this knowledge that you have preserved in your memory for seven years—which was the last knowledge you had—how long previous to that seven years' knowledge you possessed and have carried so long of Henry Hartling, had you met him before that seven years' time? A. I had met him many times.

Q. With whom? A. Nobody in particular that I know.

Q. Whom were you with when you saw him? A. I happened by, standing on the corner.

Q. And he passed? A. Yes, sir.

Q. Was he carrying his reputation with him when he went by on the corner? A. Only from what they said.

Q. Who said that that was standing on the corner? A. Numerous people who said so.

Q. Tell me who was on the corner that is a resident of San Francisco and can now be located? Tell me any one who stood on the corner of Turk and Taylor streets seven years ago and talked about his reputation? A. John L. Hergot.

Q. Prize-fighter; it was at Hergot's saloon? A. I stood there at the cigar store.

Q. You stood in Johnny Hergot's cigar store. A. Yes, sir.

Q. Was it Johnny that told you? A. No.

Q. Who was the citizen that stood by Johnny Hergot's saloon seven years ago and told you what the reputation of Henry Hartling was? A. Who was it that stood there and told me?

Q. Yes, who was the party? A. Is it necessary that I should answer that question?

Q. Well, it would somewhat reinforce your testimony. Mr. Cator would like you to tell very much who stood by Johnny Hergot's saloon seven years ago on the corner of Turk and Taylor streets and saw Mr. Hartling and his reputation go by?

MR. CATOR: I never claimed that his reputation went by.

MR. JACOBS: He went by without any reputation with him.

MR. McNAB: If he had no reputation you could not have seen it.

MR. McNAB: Q. Who was it? A. Who was it?

Q. Yes, who was it? A. Do you want me to recall everybody I know in San Francisco?

Q. Oh, no. Just who was standing in Johnny Hergot's cigar store and saloon at the corner of Turk and Taylor streets seven years ago who spoke about Henry Hartling's reputation. A. I can mention numerous people that know Mr. Hartling and what he was.

Q. Seven years ago you testified was the last time you saw him. A. I can mention several people who know Mr. Hartling and what he was.

Q. You said that was the last time you heard it discussed.

MR. CATOR: I object to that. He said he met him seven years ago, but has not said that was the last time he heard him discussed. He said he heard it discussed recently.

MR. GOULD: He said he read it in the papers recently.

THE WITNESS: I had heard it discussed.

MR. McNAB: Q. Have you discussed it with Senator French? A. I don't know Senator French.

Q. Have you discussed it with Senator Bunkers? A. I don't know him.

Q. Have you discussed it since this came up with Johnny Hergot? A. No, sir.

Q. Do you know who caused you to be subpoenaed here? A. I do not.

Q. You don't? A. No.

Q. Do you think you were subpoenaed because you stated that somebody you can not now remember on the corner of Turk and Taylor streets seven years ago had discussed the reputation of Henry Hartling? A. I don't know. I don't know why I was subpoenaed.

Q. You don't know why you were subpoenaed? A. No.

Q. Well, I don't, either. When was the last time you talked about Henry Hartling? A. About last Friday.

Q. With whom? A. A few friends of mine. Who?

Q. Yes, sir. A. I don't know who they were; can not remember now.

Q. You cannot remember your friends since last Friday? A. It was the general topic of conversation, and it was discussed.

Q. How is it, if you cannot remember whom you discussed Henry Hartling's reputation with last Friday, with people who were friends of yours, you can remember you stood on Turk and Taylor streets in Johnny Hergot's saloon seven years ago and discussed his reputation? How is it you have such a long-range memory? A. I didn't say I was discussing it then. I say people that I knew when Mr. Hartling went by would speak about him.

Q. Were they people who were afraid of him as a detective? A. No, sir; they had business with him.

Q. What was the occasion of the discussion? A. The occasion was that he was a bad man.

Q. Were they people who would be hurt because of the fear of Mr. Hartling as a detective as a good man or a bad man? A. As a bad man.

Q. People around Johnny Hergot's saloon would be more apt to object to a man because he was bad than if he was good? A. It was not in Johnny Hergot's saloon, it was in the neighborhood.

Q. How close to the saloon? A. The cigar stand.

Q. It belongs to Johnny Hergot? A. Not that I know of.

Q. It adjoined his saloon? A. Yes, sir.

Q. Johnny Hergot is "Young Mitchell"? A. Yes, sir.

Q. Ex-prize-fighter? A. Yes, sir.

Q. Did you hear Johnny speak of him? A. No; never heard him say a word.

Q. Then you don't know whom this individual was? Is your memory better at short range or at long range? A. My memory is good at all times.

Q. You can not tell me who your friends were—the intimate friends that you discussed it with Friday? A. Last Friday?

Q. Yes, sir. A. They were not intimate.

Q. How intimate? A. I casually just met them and was introduced.

Q. You were introduced? By whom were you introduced? A. A friend of mine.

Q. Who is it? A. Kelly.

Q. Which Mr. Kelly? A. Billy Kelly.

Q. What is his occupation? A. He is a tin-roofer.

Q. He is a tin-roofer? A. Yes, sir.

Q. Where does he live? A. I don't know where he lives.

Q. You don't know where he lives? A. He lives about Sixth and Howard streets in San Francisco, or in that vicinity.

Q. You can not give me his residence? A. No, I can not.

Q. Mr. Kelly, the tin-roofer, whose address you do not know, introduced you to some friends whom you did not know before and they discussed Mr. Hartling's reputation? A. Yes, sir.

Q. And that instance and the fact that seven years ago at Johnny Hergot's saloon you discussed Henry Hartling's reputation is the only knowledge you have of Henry Hartling's reputation? A. It brought it back to my memory.

Q. It brought it back to your memory? A. Yes, sir.

Q. Where are you working? A. The National Manufacturers' Company.

Q. And you are bookkeeper there? A. No, sir.

Q. If you are not a bookkeeper, what are you doing? You testified you were a bookkeeper. A. I did. That is my occupation, but I am not a bookkeeper for the National Manufacturing Company.

Q. You are working there? A. Yes, sir.

Q. What are you doing there? A. I am an agent.

Q. Agent there for what? A. For the National Stamp Machine.

Q. Who owns the National Stamp Machine? A. T. J. McDade.

Q. Owns the National Stamp Machine? A. Yes, sir.

Q. Is it not true that there are only two of these machines on the market? A. There are 175 placed in San Francisco now.

Q. And you are the agent for the placing of these? A. One of them.

Q. Did you ever talk with Mr. John McDade about Henry Hartling? A. Never spoke to Mr. McDade about Hartling's reputation.

Q. Your knowledge of Mr. Hartling's reputation consists of the people you spoke to last Friday, and you previously stated they were old friends of yours— A. (Interrupting.) I did not say they were old friends of mine.

Q. What were their names when they were introduced? Did you take their cards? A. No, sir.

Q. Who were they? A. Three in number.

Q. Where do they live? Do you know them? A. Yes, I know them now.

Q. You know them now? A. I don't know their names, but I know their faces.

Q. You know their faces? A. Yes, sir.

Q. You can not put their photographs in evidence? A. No, sir.

Q. Have you them with you? A. No, sir.

Q. So you can not identify three people whose faces you know? A. Yes, I could identify them if they were brought here before me.

Q. If they were brought here before you. A. Yes, sir.

Q. I understand the sum total of your indictment of Mr. Hartling is this: that last Friday Mr. Kelly, tin-roofer, introduced you to three people whose names you don't know, but whose faces you can identify if you see them again. A. Yes, sir.

Q. And a meeting at Johnny Hergot's cigar store, on Turk and Taylor streets—not Taylor and Golden Gate avenue—seven years ago. That is the total, is it not? A. That is when I first seen Mr. Hartling.

Q. That is all you know, is it not? A. Yes, sir.

MR. McNAB: All right.

MR. JACOBS: Q. Is it not a fact that, since this affair has been under investigation, the reputation of Mr. Hartling has been discussed by numerous people at all places in the City and County of San Francisco? A. It has.

Q. And that wherever you would go, almost any place in San Francisco, where this matter would be discussed, the reputation of Mr. Hartling would be mentioned? A. Yes, sir.

Q. You would hear his reputation mentioned by men with whom you were not acquainted? A. Yes, sir.

Q. By total strangers to you? A. Yes, sir.

Q. In discussing this affair? A. Yes, sir.

Q. And it is on that hearsay, things you heard at these various times, and what you had heard of him several years ago, upon which you base your testimony here, that his reputation is bad? A. Yes, sir.

Q. Is that correct? A. Yes, sir.

MR. McNAB: The only objection is that this gentleman has not been sworn. He has not testified and Mr. Daley has testified. These echo questions would be objectionable in court.

MR. GOULD: There is another thing that is objectionable to that. It is possible for a dozen men to start out in Sacramento and have the question of a man's reputation raised and discuss it, and have it discussed, and then bring fifty men to prove his reputation is bad. Counsel knows that what his reputation was prior to this is not available.

MR. CATOR: Where did you dig up that piece of law?

MR. McNAB: Are you through with the witness?

MR. CATOR: No; I am not. I want to show you, Mr. McNab, some testimony you put into the witness' mouth the other day.

Q. You say you heard it discussed by large numbers of persons recently? A. I have.

Q. And, from the general expression, his reputation was bad? A. Very bad.

Q. Have you ever heard any one say that he was an "affidavit man"?

MR. GOULD: That certainly is not admissible. After the testimony of this witness, I think that question is simply absurd.

MR. CATOR: Q. What have you heard in the nature of an expression in regard to his tendencies in regard to giving evidence?

MR. NICOL: That is objected to on the ground that it calls for particular acts, and does not go to make up reputation.

MR. CATOR: I mean by general expression—not by particular expression.

MR. NICOL: We object to it because general expression, specifying particular acts, is not admissible in evidence.

MR. CATOR: I offer to show that this man has a general reputation for making affidavits, hanging around police courts, and offering to make affidavits for fifty cents, and give evidence of anything that is wanted for that sum or a very small sum.

MR. GOULD: I think you can prove it by this witness.

MR. McNAB: I will admit, if the Court please, that Mr. Cator can furnish any state of facts he pleases, and this witness can be considered to have testified to it.

MR. CATOR: I will accept the admission.

MR. ALEXANDER: We are taking lessons from you.

MR. CATOR: That is all.

MR. McNAB: Oh, no; I am not through.

Q. Can you give me any reason why the people of San Francisco should have flocked up to you particularly to discuss Mr. Hartling's reputation, not knowing Mr. Hartling? A. You mean why have they flocked to me?

Q. Yes; you say wherever you went in the City of San Francisco. I understand that the City of San Francisco in its corporate capacity had a discussion with you about Mr. Hartling. I want to know how the city came to call on you. A. The city did not call on me.

Q. You say wherever you went, people came to you and talked to you about Mr. Hartling. How did they know that you were interested so that they would open the subject of Mr. Hartling with you? A. I do not say every place that I went they were talking, but mostly every place that I went it was the topic of conversation.

Q. Was Mr. Hartling—name the place. A. There are numerous places.

Q. How many saloons were they? A. May be half a dozen.

MR. McNAB: That is all.

MR. CATOR: That was as many as you visited? A. Yes, sir.

Q. You mean in all the public places you visited, you heard such talk? A. Yes, sir.

MR. CATOR: W. A. McKenzie.

THE CHAIRMAN: Is W. A. McKenzie in the room?

(No answer.)

MR. CATOR: I presume he is locked out. I will ask to have Matthew Smith called, and Mr. McKenzie looked after.

THE CHAIRMAN: Is Matthew Smith in the room?

MR. CATOR: These witnesses, I think, are barred out.

MR. RALSTON: These doors are swung open right in front of you. A man can come in or go out two sets of doors.

MR. McNAB: Is it not Mike Smith?

MR. CATOR: No, sir.

MR. McNAB: He has been overlooked.

THE CHAIRMAN: Is Matthew Smith in the room?

(No answer.)

Have you got any one else, Mr. Cator?

MR. CATOR: A. F. Schaffer.

THE CHAIRMAN: Is that Dr. Schaffer?

MR. CATOR: Yes, sir.

THE CHAIRMAN: I have a dispatch from Dr. Schaffer saying he would be on hand.

TESTIMONY OF A. F. SCHAFFER.

Sworn.

MR. CATOR: Q. Where do you reside? A. Bakersfield, Kern County.

Q. How long have you lived there? A. About sixteen years.

Q. What is your occupation? A. Physician and surgeon.

Q. Do you occupy any public position? A. Yes, sir; I am County Physician.

Q. Do you know the general reputation of Henry Hartling in that community for truth and veracity and honesty and integrity? A. I know nothing of him; never heard of him, except lately.

Q. Do you know the general reputation in that community for truth and veracity, honesty and integrity, of Mr. Tichenor? A. I have heard a number of people speak of him.

Q. From the reputation which you know and have heard, is it good or bad?

MR. NICOL: We submit, gentlemen, that this witness has not testified that he knows the general reputation. The fact that a man may have heard or seen people speak of another is not proof of general reputation. The foundation has not been laid for the question. We object to it on that ground.

MR. CATOR: Do you know his reputation among the people in that community as it is expressed and as you hear it—his general reputation for truth and veracity and integrity? A. Well, from what I have heard, it has been bad.

MR. NICOL: We ask to have that stricken out, on the ground that he has not laid the foundation.

MR. JACOBS: The question can be answered "yes" or "no."

MR. NICOL: On Mr. Gould's suggestion, we will let it in.

MR. CATOR: Q. Is it good or bad? A. It is bad.

Q. From what you have heard of it, would you believe him under oath? A. In answer to that question, I would say I would believe no private detective under oath. I have had personal relations with this man, and he was acting then in the capacity of a detective.

MR. GOULD: You have only one answer to that question?

MR. JACOBS: Let him answer the question.

MR. GOULD: He is entitled to answer the question, "yes" or "no."

MR. CATOR: Would you believe him under oath, from what you heard of his general reputation? A. I would believe no private detective under oath.

Q. Would you believe Tichenor under oath? A. I would not.

MR. CATOR: Take the witness.

Cross-Examination.

MR. GOULD: Q. How long have you lived in Bakersfield, doctor? A. I have lived in Kern County about sixteen years.

Q. How long have you lived in Bakersfield, I asked you? A. About seven years.

Q. And you have been practicing medicine there? A. I have.

Q. Have you been interested in oil, at all? A. I have; yes, sir.

Q. Have you had any particular personal relation with Tichenor there, doctor? A. At one time I did.

Q. You were one of those people, consisting of about sixteen men, that went over onto Section 26 and engaged in a gun-fight with two men who were protecting that section, were you not? A. I was over there—engaged, yes; and we had some trouble over there with a number of people—not two.

Q. And you shot two men? A. Not to my knowledge.

Q. You shot at two men? A. I shot at about twenty men; yes, sir.

Q. You shot at two men? A. I did; yes, sir; I shot at twenty men.

Q. And you shot one of those men through the leg and broke his leg? A. Not to my knowledge.

Q. And you shot another of those men through the body and crushed his arm so that one man goes about with one leg, and you shot another man through the chest, so that he lay at death's door for many weeks; is not that true? A. It is not true.

Q. It is not true? A. Not to my knowledge.

Q. What part of it is not true? A. That I don't know whether I hit him or not; I tried my best.

Q. You tried your best? A. Yes, sir; because they were shooting at me.

Q. You went from Bakersfield, about sixteen in number, for the purpose of taking forcible possession of a piece of land, and killing the men upon it, if necessary? A. No, sir; that is an untrue statement of the facts in the case.

Q. Didn't you go armed with Winchesters and Marlin rifles to shoot? A. We did; evidently we did.

Q. And didn't you, after you got there, shoot them? A. Yes, sir; we did.

Q. And did not you shoot them because the men refused to give possession of the land? A. No; I shot mine because I was going out to shoot.

Q. And were you not the captain of that so-called company? A. No, sir; I was not the captain.

Q. Were you not so elected and designated? A. I was not so elected or designated, and any position I assumed there that night I assumed of my own volition, and all I did was to line the men up so that in case of trouble we would not shoot each other.

Q. That is all that you cared—that they would not shoot each other? A. That is right.

Q. And you had an octagon-barreled rifle? A. I had an octagon-barreled rifle.

Q. Of your own? A. Of my own.

Q. And the others carried rifles that had been procured and purchased new for the purpose of making a raid upon that section of land? A. We had no cause to make a raid. We were going on our own property.

Q. You purchased some new rifles? A. There were new rifles there.

Q. Purchased deliberately? A. Deliberately, to protect ourselves.

Q. Those men were in possession of that property? A. Yes, sir; in forcible possession.

Q. In possession of that property, and had jumped the property that you claimed as settlers? A. Yes, sir; they had gun-fighters there who do business, and we threw the men off of our property.

Q. And after this, you bought this land from these same parties? A. We bought nothing from them except the machinery, and we did that because they begged so pitifully.

Q. Was that when these men were crippled with these shots? A. That is after the trouble occurred.

Q. Is it not a fact that you returned on April 20th—this occurred on the night of April 19th and 20th? A. Yes, sir.

Q. 1901? A. I think that is correct.

Q. Did you see the "Morning Echo" of Bakersfield? A. I suppose I did; I do not recall now.

Q. Did you have an interview with the reporter of that paper on your return from that place? A. I had an interview with many people.

Q. Did you have an interview with the reporter of that paper? A. Not to my knowledge.

Q. Did not the reporter of that paper publish this statement that you made with your own lips: "With this in view, representatives of the Mt. Diablo Company, including Messrs. Dunlop, Neil, and Schaffer, left town Thursday for the Midway District. There were about eight in the party and most of them armed. They expected to make a camp at their cabin on their claims, and did so, and met the adverse claimants yesterday morning. While encamped for the night they heard report of guns, and knew that trouble was on hand. They went over to the headquarters of the San Francisco Oil Company, and there learned that a pitched battle had taken place between a so-called vigilance committee representing the oil lands claimants in the Midway District. They were informed that two men had been shot, one dangerously. Doctor Schaffer"—that is you—"volunteered to attend the injured men if necessary, but was told that a physician had been summoned from McKittrick. He stated that if the wounded men were not bleeding internally, that the men were not in any immediate danger." Did you have that interview with the reporter of this paper. A. Part of it is correct; yes, sir. I volunteered to take—

(Mr. Gould and witness talking at the same time.)

MR. CATOR: The witness has been given no opportunity to finish his answer, and they admit it is a fault of theirs to question him before he finishes his answer.

MR. GOULD: That is true.

THE WITNESS: I say, Mr. Gould, that it was true that I offered to attend any that were wounded, if they were bleeding severely, as I had no appliances to take care of them at hand in any other manner, but if they were bleeding, I could stop the hemorrhage. That is true.

Q. Did you state that after you returned to Bakersfield? A. Yes, sir; I stated that after my return to Bakersfield.

Q. Did you state that when you returned to Bakersfield at that time you were one of the men who did the shooting? A. I did not; no, sir.

Q. You stated that it was done by a vigilance committee? A. Not to my knowledge. I heard there was a vigilance committee ordered in that district, but I was not one of them.

Q. And is it not also true that there was published in the same paper on Sunday, June 9th, 1901, an interview in which you stated this:

"Tichenor claimed to have a large amount of evidence damaging to the arrested," and didn't you state and deny absolutely your complicity in that assault? A. I never denied it; I always openly said I was there.

Q. You always openly said you were there? A. Yes, sir.

Q. Will you tell why it is that the papers down to Sunday, June 9th, six weeks after this, stated publicly, in a paper that you read every day in the little town of Bakersfield, that you denied this assault? A. I am not standing sponsor for what every paper states.

Q. You saw it in the paper? A. I did not to my knowledge.

Q. You did not declare, when you returned to Bakersfield, that you were interested in this assault? A. I did.

Q. Immediately on your return? A. Yes, sir.

Q. What did you mean by stating five minutes ago that you did not do so. A. I made no such statement, if you will refer to the reporter's notes.

MR. GOULD: I appeal to the reporter's notes.

MR. CATOR: You thrust your questions so it is difficult to tell what anybody testifies to.

MR. GOULD: Is it not also true that, in the preliminary examination of this case, you were discharged from a number of those accused for the purpose of turning State's evidence? A. I was not.

Q. Were you not discharged? A. I was discharged. The thing put me in a bad light, and I absolutely refused to allow the thing to stand.

Q. What bad light? A. That I would turn traitor.

Q. In other words, you were discharged to turn State's evidence, and afterwards refused to turn State's evidence? A. That was not it at all. They wished to eliminate me from the case at all, that they might levy blackmail on the rest, through fear of what might occur if the case went to trial.

Q. You mean Jack Ahern? A. Yes, sir.

Q. Jack Ahern, who is now dead, was levying blackmail on the rest? A. No, sir.

Q. Mr. Emmons was the assistant prosecutor; then it must have been either Ahern or Emmons? A. It was neither one to my knowledge. That was my fear, that they might try and institute proceedings.

Q. It was your fear that blackmail proceedings might be instituted against you? A. Not against me.

Q. And therefore you promised to turn State's evidence if you would be dismissed; and you were dismissed, and then you did not turn State's evidence? A. After it was over?

Q. Yes. A. Of blackmail?

Q. Yes. A. It came as a total surprise to me when they dismissed me from the case.

Q. What did you mean by saying a moment ago that you wanted to get out of it because you were afraid you would be blackmailed? A. I made no such statement.

Q. Who was to be blackmailed? A. The rest of the people.

Q. Who was to blackmail them? A. I say that was the thought that went through my head, that it might be the intention of the District Attorney to do so.

Q. Mr. Emmons and Mr. Ahern were the prosecuting officers—Senator Emmons? A. Senator Emmons, I believe, was the assistant prosecutor.

Q. And it was through fear that Jack Ahern (who is now dead) and Senator Emmons would blackmail you, that you were dismissed from this case? A. I never knew of either one of them ever being interested in a blackmailing scheme to my knowledge; simply that my associates might think I would go and try to obtain immunity for myself, and that was my reason.

Q. Didn't you go to them privately and try to secure immunity? A. I did—no, sir; I did not go to them to secure immunity.

Q. Didn't you? A. No, sir; I did not.

MR. NICOL: Q. Which do you mean—you say you did and you didn't? A. I never did a thing in my life that I had to seek immunity for.

Q. You say you did, and then you say you didn't; which do you mean? A. I did not think of seeking immunity for this.

MR. GOULD: Q. But you did go to him to be dismissed? A. I went to him not to be dismissed.

Q. And asked him to dismiss you? A. I told him that I would not tolerate it; that if I was dismissed, that I would see that I was called as a witness, and that I took an active part in there and I failed.

Q. Whom did you tell that to? A. I told that to the District Attorney.

Q. I want to ask you if you saw this statement on June 10th, 1902, in respect to this controversy, published in the "Daily Californian"—who is the editor of that paper? A. Mr. Herrold.

Q. A respectable, reputable man? A. A respectable, reputable man, as far as I know him.

Q. How long have you known him? A. About sixteen years.

Q. Stands as high as any man in that community? A. As far as I know.

Q. Was subpoenaed here as a witness and excused? A. I do not know whether he was excused or not.

Q. Did he not in quotation marks, in his issue of the "Daily Californian" of June 10th, 1901, five months after the shooting took place, credit you with making a statement to him, in the following words: "When you surrendered yourself to the officers of the law upon a charge of conspiracy to commit assault with intent to commit murder, I knew the warrant would be served on me sooner or later, and I gave myself up, as I feared otherwise that the warrant might be served just at a time that I might be called out of town. As this would interfere with my business, I gave myself up, and was released on bonds. I have nothing to say concerning the shooting. I will deny, however, that I had a hand in it." Did you make that statement to Mr. Herrold? A. I did; I think that is a true account.

Q. (Continuing reading.) "Provided, however, that I had been there even alone I would tell openly in court that the man who was wounded was a hired assassin; and I was sorry that the bullet did not kill him. However, as I was not there, it is useless to talk of the matter." Is that true? Did you give them anything? A. I think I gave the most of it.

Q. Did you give it all as stated there? A. I think I did. That is my sentiments, I know.

Q. That is all. A. I guess I said it.

MR. CATOR: Q. Dr. Schaffer, this matter has been inquired into about the shooting—

MR. GOULD: (Interrupting.) My associate has suggested a question.

MR. CATOR: All right.

MR. GOULD: Q. Which one did you shoot at? A. I shot at about twenty.

Q. Which one did you shoot at? A. I shot at Cornell, I was told. He was in front of me and shot at me, and I shot at him, and afterwards I shot at flashes of the gun and fire.

Q. What guns? A. The thugs'.

Q. What guns? A. The flashes of the guns that were in the hands of the hired thugs that took forcible possession of our property.

Q. Who were those hired thugs that you spoke of—the one that you shot? A. Cornell was one and Walker was the other.

Q. Cornell was one and Walker was the other? A. Yes, sir. He asked me if I knew them, and I said I ought to know them. A few months ago they shot six times at me.

Q. You do not blame them much, do you? A. No; I do not blame a thug for doing anything; I am not surprised at anything they do.

Q. You set him a very good example? A. He set me a good example by shooting at me when we were talking peaceably to him on our own land.

Q. I want to ask you where Cornell came from on this place? A. He came from the northern part of the State, where he had been in all sorts of trouble.

Q. Came from Tehama county? A. I don't know; some place in the north; I know he came with a very bad reputation.

Q. You had heard of his reputation? A. I certainly had.

Q. Where had you heard of his reputation? A. In Bakersfield. He boasted of it, and his friends boasted of it, and they said he was a bad man and a thoroughbred, and I think he is.

Q. Then you give him a good character? A. I give him a good character as a thug.

Q. You mean by a thug, I suppose, a man who goes out in the night—a party of men who go out in the night at 12 or 1 o'clock, armed with loaded rifles, for the purpose of killing anybody that comes in their way, to take possession of a piece of land, instead of resorting to the due process of the law; that is a thug. A. Yes, sir; your definition is a very good one.

Q. That is all. A. If their object is murder, to take possession of the land.

Q. That is all. A. Covers it in part, anyway.

MR. CATOR: Q. Dr. Schaffer, so much time has been taken up, and so much said here, and no explanation made of this, I wish you would give a brief explanation of how that matter arose without questions being asked, and without being interrupted; just state why it was that this party went out there, and who occupied that land, and in what manner, and what the cause of that difficulty was.

MR. NICOL: Are you claiming a man has a right to kill a man with whom he has a civil dispute?

THE WITNESS: I did not go to kill a man.

MR. CATOR: I asked him to explain what it was.

MR. SIMPSON: I would suggest that the committee does not care to hear all this matter.

MR. CATOR: We want the truth of it. They have tried, of course, by interjecting a question in the middle of the answer, to so cut up his answers as to please themselves. I want him to briefly state in about a minute what the trouble was.

MR. SIMPSON: He may not be able to do it in a minute or in an hour. I think the committee can sift this down.

MR. CATOR: When a man is claimed to be a murderer, he has a right to show he is not.

MR. JACOBS: They have sought to show that he went out there for a certain purpose. He did not go out there for that purpose, and we want to show that to the committee.

MR. SIMPSON: The fact that is apparent is that these gentlemen went from Bakersfield with guns, either to dispossess or argue with somebody in possession of the land, and that thereafter the shooting affray took place. Personally, I do not care anything about the merits of it, or who began the shooting, or anything else.

MR. GOULD: The only object of the testimony is to show the animus of this witness towards Mr. Tichenor. That is the only relevancy.

MR. JACOBS: You may care to show the purpose of that visit. The impression that Mr. Gould is endeavoring to convey is that these men went out there for the purpose of a fight.

THE CHAIRMAN: Can't you get at this by asking a question or two, without asking the witness to state what happened?

MR. CATOR: Perhaps I can do so. They have wasted so much time in regard to this, I will ask you about it.

Q. The men you shot out there—did they commence to shoot?
A. They did; yes, sir. They shot while an unarmed man was talking peaceably to them.

Q. Went out there to conduct a peaceable conversation? A. Yes sir.

Q. And they were all armed? A. I never saw but one man at the time; we were all armed.

Q. You mean by that you went there, and when you arrived, you attempted to have a peaceable interview with some of them? A. Yes, sir.

Q. And that peaceable interview actually commenced, did it? A. It did. The man told them that we came there to discuss the matter with them, and that we had no idea of doing any one an injury; and while he was speaking the man shot, and we were armed, not for the purpose of doing injury to any one, but simply as a matter of precaution. We heard much of their bad character, and so we did not know what they might do, and it eventually proved to be a very wise precaution.

Q. They were all armed? A. They were all armed.

Q. One of the band, while one of your men was talking peaceably to them, shot? A. Point blank at him.

Q. Was that followed by other shots from either side? A. Yes, sir; about fifty.

Q. Was it in answer to that that you said you shot? A. Yes, sir.

MR. GOULD: Q. Nobody of the sixteen was hurt? A. Fortunately, no. I am glad of it.

Q. All of the two were hurt? A. All of the two were hurt.

Q. This was half-past 12 o'clock at night? A. Yes, sir.

Q. A dark night, was it not? A. Yes, sir. I would like to explain how we came to be there

MR. CATOR: Go on. You have a right to explain.

MR. GOULD: It is not any explanation.

MR. ALEXANDER: Go on, Doctor.

THE WITNESS: It was impossible for us to get there any sooner.

MR. GOULD: You knew Mr. Tichenor was on this case? A. What case?

Q. The man—— A. Yes, sir; I did.

Q. He was the detective that hunted up the evidence? A. Yes, sir.

Q. A Pinkerton? A. He claimed to be a Pinkerton. I would not believe it, though, or anything he would say.

Q. You would not believe anything he said? A. No.

Q. You hate him? A. No. As far as I know that man did his work well. The facts that he returned to the people were true, as far as I know. I am speaking on general principles.

Q. You have a grudge against this man? A. No sir. He simply returned facts that I am willing to admit——

Q. (Interrupting.) He made truthful reports? A. As far as I know, he did.

Q. And the only reason you would not believe him is because you would not believe any private detective? A. Yes, sir. I think the ethical centers of a detective are very poorly developed.

MR. SIMPSON: Are you acquainted with Senator Emmons? A. I am; yes, sir.

Q. How close is your acquaintanceship? A. I have known him very intimately for about twelve years.

Q. Have you ever had any business relations with him? A. I do not think I have ever employed him as an attorney.

Q. Has he ever employed you? A. Never in the world.

Q. Has your acquaintance with him for the past twelve years been intimate? A. Fairly so.

Q. Are you what would be termed a close personal friend of Senator Emmons? A. No; I am not; I very seldom see the man. I simply meet him on his election tours and casually about town. I am a very busy man and so is Emmons; we do not meet often.

MR. SIMPSON: That is all.

TESTIMONY OF S. ROUSSEAU.

Sworn.

MR. CATOR: Q. Where do you reside? A. At Bakersfield.

Q. How long have you resided there? A. I have lived there, except a few years away, since 1880.

Q. What is your occupation? A. Since 1893 as a lawyer.

Q. Do you know the general reputation of Henry Hartling in that community for truth and veracity, honesty and integrity? A. Of whom?

Q. Henry Hartling? A. Give the question again.

Q. Do you know the general reputation—repute—of Henry Hartling at that place, for truth and integrity, honesty and veracity? A. Yes, sir; not exactly of that place. It was in the neighborhood of the swamp region, where a number of persons were interested in swamp land. He did not live in the town of Bakersfield.

Q. Do you know his reputation among the people at Bakersfield—his general reputation—what is said of him there? A. Among those who knew him?

Q. Yes. A. Most of those were not in Bakersfield; they were out in the country.

Q. They were adjacent? A. Among those that knew him first the

reputation was good enough; they were rather pleased with him; but as they learned something about his general character, it was exactly opposite and was exceedingly bad; and the terms they allied to it were that he was a spy among them and a traitor to them. That is about all the exact words that I am able to give that they said, but they spoke of him nearly every time I saw them.

Q. From what you know of his reputation, and from what you have heard said, would you believe him under oath? A. Give me that again?

Q. From what you know of his reputation, and what you have heard said of him, would you believe him under oath? A. Oh, no.

MR. CATOR: Take the witness.

MR. McNAB: No questions.

TESTIMONY OF J. W. BRISCOE.

Recalled.

MR. CATOR: This witness was sworn, I think, but did not testify.

THE CHAIRMAN: Yes, sir.

MR. CATOR: Q. Mr. Briscoe, where do you reside? A. Bakersfield.

Q. How long? A. Five years.

Q. What is your occupation? A. Well, I am in the oil business there at present. I have been in that for the last five years.

Q. Do you know the general reputation of Mr. Tichenor at that place for truth and veracity and honesty and integrity? A. I do.

Q. Is it good or bad? A. It is very bad.

Q. From what you know of it, would you believe him under oath? A. I would not.

MR. CATOR: That is all.

Cross-Examination.

MR. GOULD: Q. Did you have any personal acquaintance with Mr. Tichenor at any time? A. Not particularly, and I do not care to have.

Q. He was down there in relation to that shooting that took place on the west side, was he not? A. I presume so; yes, sir.

Q. And you sympathized with the shooters very strongly? A. Somewhat.

Q. You were one of those who had a considerable quantity of land there, and you did not want anybody to interfere? A. No; particularly thieves and jumpers.

Q. You do not want any jumpers to get there? A. Yes, sir.

Q. Mr. Jamieson who was here had about fifty thousand acres of land located down there? A. I could not tell you.

Q. An immense amount? A. Quite a little amount.

Q. It was a tremendous amount of land? A. I do not know whether it was tremendous or little amount or quite an amount.

Q. Thirty thousand acres, at least?

MR. ALEXANDER: You can call Mr. Jamieson and find out how much land.

MR. GOULD: Q. How much? A. I possibly could tell you.

Q. Just tell us if you possibly could. A. Possibly I could. He had quite a good amount of land there.

Q. It was about thirty thousand acres, was it not? A. Not knowing exactly the amount, I would not like to answer.

Q. It was in that vicinity? A. Well, between him and others, had probably that much.

Q. And this was the company that was gathered there to eject those men over on that section? A. How is that?

Q. And it was of this company that they gathered there to eject those men over on that section? A. What section?

Q. Section twenty-six, where this fight took place? A. No, sir.

Q. Was not Mr. Jamieson there? A. He was. He said he was last in it. You know it.

Q. I didn't say that you were—the people were in that company that owned all that vast quantity of land? A. No; you are on the wrong hook. Go on; I will answer the question.

Q. It was out of that difficulty there that Mr. Tichenor's reputation arose, was it not? A. It was not.

Q. Did you ever know him anywhere else? A. No, sir.

Q. Were you ever in Arizona? A. Why, yes; I run through there a few times.

Q. Whom did you work for in Arizona? A. I don't know as I worked for any one on earth, only Jim and myself.

Q. Who is Jim? A. Myself.

Q. Do you know Quiggle, down there? A. I did not.

Q. Did not know Quiggle? A. I do not know that I know a man in Arizona. I have gone through there quite often.

Q. What were you doing in Arizona? A. The train runs through there, and I have got a perfect right to ride on it.

Q. The train runs through there, sure enough. When did you discover that? A. Oh, I probably learned it as soon as you found it out.

Q. Did I understand you to say that the only time that you ever was in Arizona was when you rode through on the train? A. That was the only time.

Q. You never lived in Arizona? A. I never did.

Q. That was a nice answer to make; thank you. A. I can answer gentlemen.

MR. ALEXANDER: This is not a kindergarten, Mr. Gould.

MR. GOULD: Q. Is it not a fact that the people who spoke harshly of Mr. Tichenor were those people who had caused accusations for assault to murder to be made in Bakersfield, and those interested with them?

A. I did not understand the question.

MR. GOULD: Will you read the question, Mr. Reporter?
(Question read.)

A. I think that I know probably two thirds of the people in Bakersfield.

Q. Yes, sir. And two thirds of them that I know would say that Mr. Tichenor is a very bad man.

Q. That is true? A. No good.

Q. Those people who are interested with those men who went over on section twenty-six that night—most of them? A. No, sir.

Q. The only time Mr. Tichenor lived in Bakersfield was when he was a detective on that case? A. I don't know; I know he was there then.

Q. That is the only time you saw him there? A. That is right.

Q. And the only time that you ever heard of him there? A. That is possible, too.

Q. And there was a sentiment there among the people of Bakersfield very strong against any man who would jump an oil claim, was there not? A. I do not know of any reason why there should not be; yes.

Q. That is not the question—there was? A. Yes, sir.

Q. It was very bitter? A. Well, there was a sentiment against it; yes.

Q. Very bitter? A. That is possible, too.

Q. And is it not a fact that anybody who would jump an oil claim in that vicinity at that time was regarded with very, very harsh judgment in that community? A. Well, I am pretty certain I would have been.

Q. Well, it was so with nearly everybody? A. At least it should have been.

Q. It was so with nearly everybody? A. I could not tell you what other people thought, altogether—only what they expressed.

Q. That is what you heard? A. Yes, sir; I guess that is right.

Q. And those are the facts of the case. There were a great many people in Bakersfield who had located quite a large territory around there—is not that true—as oil lands? A. Yes, sir; the most energetic of them got out and rustled a little bit.

Q. Some located five thousand, some a thousand, some ten thousand, and so on, locations of lands, by filing notice of location in the office of the Recorder—that is true? A. I do not know how much they got. I did not get very much.

Q. You say you did not get very much? A. I did not get as much as I ought to have got.

Q. Among all those people who had those claims, there was a very strong prejudice against anybody who would locate over any other claims? A. Especially where they tried to steal it or jump it.

Q. That is the fact as I have stated it. Stealing or jumping it is the same thing in your mind? A. Yes, sir.

Q. Just the same thing; that is the way you regard it, then? A. Yes, sir.

Q. And it was because of the fact that Mr. Tichenor was associated with others in endeavoring to ferret out a crime committed against a jumper, or a thief, as you call it, that the people there were very resentful against him; is not that true?— A. Probably that was a part of it.

Q. That was practically all of it? A. No; I do not think so. He showed himself to be not very much of a gentleman all the time he was there.

Q. You never had any intercourse with him yourself? He stood well as a detective; that is, he was considered a good detective, was he not? A. Well, I do not know what a good detective would be.

Q. He reported the facts that he ascertained correctly, so far as you know?

MR. ALEXANDER: The witness has not testified he knew. This is trying to prove a negative, that the witness has not said he knew anything about it. We will object to that line of questioning.

MR. SIMPSON: What is the question?

(Question read.)

MR. ALEXANDER: The witness has not testified he knew anything at all about those facts—proving a negative. They are going into all these matters which we are prevented from going into.

THE CHAIRMAN: Do you make that as an objection?

MR. ALEXANDER: We do; yes, sir.

THE CHAIRMAN: The objection is overruled by the committee.

MR. ALEXANDER: Exception.

A. (After question read.) Well, you will have to go a little further than that. I do not know what he ascertained. You waited a little too long. I do not know what you are talking about.

MR. GOULD: Will you read the question again, Mr. Reporter.

(Question read.)

Q. Did he not? A. Oh, I could not say.

Q. You do not know anything about that, do you? A. I know some things were reported, and some were reported that I do not know anything about.

Q. I say he reported the facts so far as he ascertained them, to his employers, correctly, so far as you know, did he not? A. So far as I know.

(Answer read.)

THE CHAIRMAN: He did or did not?

MR. ALEXANDER: Do you know what he reported? A. I do not know anything about what he reported.

MR. RALSTON: The question has been answered.

THE CHAIRMAN: I asked him a question. The question was, as I understand it: "He reported the facts correct, so far as you knew?" You say: "So far as I know." He did or did not? So far as you know, did he report them or did he not report them correctly—so far as you know? A. Mr. Chairman, I do not know whether he reported anything or not.

MR. ALEXANDER: That is what we are trying to get at.

THE CHAIRMAN: Q. You do not know whether he reported anything or not? A. No.

MR. McNAB: That is all.

MR. CATOR: Q. You have no knowledge of what he reported at all? A. Certainly not.

TESTIMONY OF E. J. BOUST.

Sworn.

MR. CATOR: Mr. Boust, I will advise you—I daresay the committee will also—that you have a right to complete an answer to a question when you commence to answer it, regardless of a question interjected in the middle of it.

Q. Where do you reside? A. Fresno.

Q. How long have you resided there? A. Since 1888, off and on.

Q. Have you lived in Bakersfield? A. Yes, sir; I have lived in Bakersfield.

Q. Do you know the general reputation there of Mr. Tichenor for truth and veracity, honesty and integrity? A. Yes, sir.

Q. Is it good or bad? A. Very bad.

Q. From what you know of his general reputation, would you believe him under oath? A. No, sir; not with what he done to me.

MR. GOULD: With what he done to you?

MR. CATOR: Take the witness.

Cross-Examination.

MR. GOULD: Q. Now, what did he done to you? A. Well, he acted the part of a detective for a shooting scrape in the Midway District, dogged me around from day to day, trying to get me to confess to something that I had no connections with——

Q. That is the shooting——

MR. CATOR: I will insist that you give the witness a right to complete his answer.

MR. GOULD: I thought he had concluded.

MR. CATOR: You think lots of things.

MR. GOULD: Do not make that remark again to me.

THE CHAIRMAN: So far as I am concerned, as a member of this committee, I am tired of the bantering between attorneys and the witnesses too, as far as that is concerned, and I think we ought to conduct this with more decorum.

MR. GOULD: I do not think I have conducted myself otherwise than in a decorous manner. I have not spoken until I had to speak.

THE CHAIRMAN: I would ask counsel hereafter to let the witness answer before another question is put. We have got a little time; there is no particular hurry, and I think it will be an advantage for all if we have as little by-play as possible.

MR. GOULD: I agree with the Chairman fully.

Q. Had you finished your answer, Mr. Witness? A. What was the question you asked me?

MR. RALSTON: Read it.

THE CHAIRMAN: Let the Reporter please read the last question and answer.

(Question and answer read.)

MR. GOULD: I wish you would kindly amend that question to: "What has he done to you?" please.

Q. Are you through with your answer? A. Mr. Tichenor made an appointment with a friend of mine to meet me in Bakersfield. I drove into Bakersfield, not knowing about this appointment, and the gentleman introduced me to him, and he invited me to go up into his rooms over the Opera House in Bakersfield, and when he got me there he told me who he was and what he was, and he says to me: "Now, you are connected with this case." I told him I knew nothing about it at all—that it was—that the people on the outside—that the jumpers had accused me of being connected with that, and I was not connected with that. Mr. Tichenor says to me: "Now, Boust, you can help me out of this, you being an officer for years, and being in the United States Marshal's office, you can help me out, and will be able to convict these people." I says: "Mr. Tichenor, I am not in that business any more, I am in the oil business now, and left that to one side." That ended that one time I met him. I met him again three or four days afterwards. He says: "Boust, come to my room," and I went to his room. He says: "I want you to help me out." I says: "I cannot help you." He says: "Come and see Mr. Cornell, father of the boys," and I went and saw Mr. Cornell, and talked with him, and Mr. Cornell in that conversation with me agreed that I had nothing to do with it, and told me so. This man Tichenor went out again into the fields, and said he had more evidence against me, invited me to his room, and asked me to

confess, and I says: "I cannot confess to something I have not done." Then he says to me: "I will make you confess." I says: "The man does not live to make me do anything." Then he says to me: "It will be a feather in my cap if I can convict these people, and I will make it an opportunity to you to help me out."

MR. JACOBS: Q. An opportunity or an object? A. An object I should have said—"an object to help me out." As far as the shooting scrape was concerned, I was not nearer than you gentlemen are right now.

MR. NICOL: Q. Were you any further away? A. Any further away?

Q. Yes. A. I own the land in Section 23 and Section 22, and I was no where near them.

MR. GOULD: Q. Is it not a fact that Mr. Cornell accused you—that you were the man that shot him? A. Yes, sir—after that man tried to convince him that I was the man that shot him.

Q. Do you know—— A. (Interrupting.) I know that by what Mr. Cornell says.

Q. Is it not a fact that Mr. Cornell the very morning after the shooting accused you? A. Yes, sir; he did. Do you know the reason why? I can explain that to you.

MR. CATOR: Q. Go ahead and explain it. A. You bet I can. I own a lot of land in the Midway District. I suppose I own in the neighborhood of 3,500 or 4,000 acres, which I bought and paid for. Some of it I located, but the most of it I bought and paid for the locations. Mr. Cornell was hired by a company which is known as the Sunset Extension Oil Company. This company went out into the Midway District and jumped every piece of land that there was in that district, and they hired gun-fighters to hold the land down. I wanted to operate on a piece of land, and I attempted to move a rig on it, and Mr. Cornell met me at the line, and says: "Where are you going?" I says: "I am going on this land I bought and paid for; it is mine." He says: "Don't you come another inch." I says: "Why?" He says: "I am here to keep it for you." To show you what kind of a man he was he had with him at that time an ax, two six-shooters, and a Winchester rifle.

Q. Go on and explain. A. I tried to get on the land, and he made two or three strikes at me with the ax. I called to my men: "Boys, keep that time until I come back." I went to the City of Bakersfield and swore out a warrant for Mr. Cornell for attempt to assault, and when he was going to town I got on the land, and he never got on it again; and when he came out again he was naturally sore, because he had hired himself out as a gun-fighter, and that was the first job there, and he lost it.

MR. GOULD: Q. What has that got to do with Mr. Tichenor? A. That is the reason Mr. Tichenor was sore at me; that is all.

Q. And that is the reason he charged you with being one of those people that shot Cornell on the morning that the shooting took place? A. Yes, sir. Didn't I drive over to Mr. Cornell where he was shot to pieces, and went in and says: "Mr. Cornell, I am sorry you are in this condition; if there is anything I can do for you, there are two or three teams in my stable at your service to take you anywhere you want to go."

Q. What did Cornell say to you? A. He said this to me. I am not afraid to say what Cornell said to me. He says: "Boust, why did you leave that crowd in here?" I says: "Mr. Cornell, I did not." I says:

"Mr. Cornell, what are you talking about?" He says: "Boust, you did leave that crowd in there." I says: "Mr. Cornell, you are on your death-bed, and God Almighty is liable to take the breath out of your body at any time; for God's sake don't die with a lie on your lip."

Q. He then said you were one of the men? A. Yes, sir; and being edged to afterwards by this man Tichenor.

Q. Had Mr. Tichenor been there at that time? A. No, Mr. Tichenor had not been there, but he was there a few days afterwards when his father hired him to come there.

Q. When Mr. Cornell's father hired him? A. Yes, sir; he told me; I suppose it is so—Cornell's father and the Sunset Oil Company.

Q. You have told all the reasons why you would not believe Mr. Tichenor? A. No. Mr. Tichenor offered to bribe me to go in with him to convict these people, and wanted me to swear to things I did not know anything about.

MR. CATOR: Q. Offered to bribe you? A. Yes, sir.

MR. GOULD: Q. What bribe did he offer you? A. Offered me he would make it an object to me.

Q. To tell the truth? A. To tell a lie.

Q. Did not Mr. Tichenor tell you at that time that you were one of the parties that was out there that night? A. Yes, sir. And ask Mr. Tichenor what I told him.

Q. Had not Mr. Tichenor at that time seen Mr. Cornell, and got his information from him? A. Yes, sir; I suppose he saw him.

Q. And didn't you have covers to the boxes of the rifles? A. Yes, sir, I had the covers. You bet I did.

Q. Hid away? A. You bet I had the covers. I picked them up in the road.

Q. Had them hidden? A. Had them in my care—not necessarily hidden. Mr. Tichenor wanted them, and I would not give them to him. Furthermore, I want to state here that I was arrested twice for this murder—attempted murder, over there. The first time the district attorney discharged me for lack of evidence. The next time I was arrested about six or seven months afterwards, and was tried by the justice of the peace, and I never put a witness on the stand—their own witnesses acquitted me; had no evidence against me.

Q. Were you not discharged to give testimony as well? A. No, sir; that is a falsehood from the bottom to the top of it.

Q. What is a falsehood? A. That I was discharged to give—

Q. You were discharged at the same time Dr. Schaeffer was? A. Yes, sir; I was discharged for lack of any evidence to hold me in the case.

Q. Then you really did not do any of that shooting? A. No, sir; I did not.

Q. And you are mad at Tichenor because Tichenor thought you did? A. I am mad at Tichenor, because he is no gentleman. A man that will try to convict an innocent man is no gentleman, and no detective; he is a Hawkshaw.

Q. Have you ever had any other difficulty with Mr. Tichenor? A. Yes, sir, I have; I will tell you that difficulty, too. That was the only difficulty I had with him—was connected with the Continental Loan Society; that was all.

Q. What was that? A. That was this: I bought a little piece of

property in Fresno, and we have two pieces of property there, and several blocks. If you will look on the records you will see what we have got there.

MR. NICOL: We will admit you are thrifty.

THE WITNESS: This piece of land, I bought it a long time ago and never been able to sell it. I paid \$600 for it, and been trying to sell it for years, and was not able to sell it, and I found an opportunity to borrow from the Continental Loan Society \$1800, and I borrowed the \$1800 on it, and they come and run a bluff on me, and told me I had to pay up; and I let it go on until I got ready to pay it, and they sent this man Tichenor as a bulldog to run a bluff on me, and said he would put me out of the house, and I said he could put me out of the house if he wanted to, and the Continental sent me a long letter—it is in my office, and if you want to see it I will bring it up here—that they would take the property, and they would make us pay the deficiency in the judgment, as Mr. and Mrs. Boust are good for it.

Q. Then you did not make your payments? A. He did not make me do that.

Q. You did not make the payments? A. I did not.

Q. When they were due? A. No, I did not.

Q. You borrowed then \$1800 on \$600 worth of property, and you propose to make the company lose the money? A. When I get ready to pay them I will pay them.

Q. Then you were engaged in a little bunco game on the company? A. No, sir; I asked your agent how much he will lend me on the house, and he says: "I will lend you \$1800 on it"; and it was a good opportunity to get the money for that property, and I took it. What is furthermore about that loan there, I did not dog Mr. Gill for it. He dogged me; he was after me every day, and wanted to know when I was going to take it out, for three months.

Q. Since Mr. Tichenor was down there you made your payments? A. No, I do not think I have. Your contracts call for at the beginning of the month, and I pay at the end of the month.

Q. You pay it—— A. I tell you, I will pay it simply for one reason; if you want to know what that is, I will tell you.

Q. Let us have it. A. I will pay it to avoid a law suit. I have been in so many law suits over land that I do not want any more law suits over land. I paid that to avoid a law suit.

Q. The question of business honesty had nothing to do with your paying it? A. Yes, sir; I am a whole lot honestier than the Continental Loan Society, and a good many others connected with it.

Q. The question of business honesty had nothing to do with it; you paid it to avoid a law suit? A. I paid it, because I borrowed the money on it. When I don't feel like paying it, I won't pay it; I tell you that now.

MR. ALEXANDER: Q. You say that Mr. Tichenor tried to bribe you to confess to convict some innocent men? A. Yes, sir; he told me I had to do it.

Q. Tried to force you to do so? A. Yes, sir.

Q. And would make it an object, or money consideration, if you would do so? A. There was no money mentioned; he said he would make it an object to me.

MR. GOULD: Q. You are the man that Sam Dunlop whipped for——

(Here, amid tumultuous laughter from the audience, the witness answered: "No, sir," interrupting the question by that answer, and kept on talking, making it impossible for the reporter to hear what he was saying.)

MR. ALEXANDER: I think that Mr. Gould is trying to make a kindergarten affair out of this. He is interjecting questions which are beyond the line of all reason.

THE WITNESS: It is not the fact, I will tell you; that is another falsehood; I licked Mr. Dunlop myself; he will tell you the same thing, and Mr. Mason (?) will tell you the same thing.

MR. McNAB: Read the question. It is a proper question.

MR. ALEXANDER: Anything you ask is proper.

(Question read.)

MR. McNAB: That was it. Add "confessing."

MR. GOULD: Q. You are the man that Dunlop whipped for it—because you got drunk and confessed. That was what the question was. A. I would like to make a statement. That is a falsehood, too, from the lawyer up to Mr. Tichenor both, when they said I got drunk.

Q. I am asking you the question. You do not mean— A. (Interrupting.) Do not say that I got drunk. Whenever I get drunk I ain't afraid to tell it, but that night I was not drunk. I want to tell you I have been drunk lots of times. In answer to giving the Midway away, it was another proposition about me and Mr. Dunlop in regard to a race-horse.

MR. McNAB: That is all.

MR. ALEXANDER: There is a question unanswered.

MR. McNAB: What is it?

MR. ALEXANDER: One insisted on by Mr. McNab.

MR. McNAB: I wanted to get the record straight.

THE CHAIRMAN: Have you another witness, Mr. Cator?

MR. CATOR: I thought that I could examine witnesses here and have them permitted to answer questions without two or three counsel interjecting questions into the midst of almost every answer they attempt to make; if I thought I could do that, I would try to go on. I feel that I have tried, as far as I am personally concerned, to be as courteous as I can with counsel on the other side, and I have not had a word with counsel on the other side in a case for thirty years; but my friends admit it is a bad habit they have of breaking into the answers of my witnesses all the time. There is no disposition to try and do better, although the fault has been frequently confessed. I think that witnesses should have a fair opportunity—

THE CHAIRMAN (interrupting): I think your witnesses will be given a fair opportunity before the committee, and if you have another witness, we would like to have you put him on.

MR. CATOR: I would like to have W. A. McKenzie called. He has been called, but I do not know if he is here.

THE CHAIRMAN: Is Mr. McKenzie in the room?

No answer.

MR. CATOR: Matthew Smith. Mr. Chairman, as these witnesses do not answer—they have been here; I do not know where they are in the city—I have now examined nineteen or twenty witnesses, and I desire to call Mr. Schlesinger; you say he has telephoned to you, and the reason for his non-appearance here is one we all appreciate.

THE CHAIRMAN: He will be here to-morrow.

MR. CATOR: I am through, so far as I know, except witnesses from Downieville. The Sergeant-at-Arms has not reported yet from Downieville, and with the exception of Mr. Schlesinger, I believe at the present time I desire to reserve the remaining witnesses from that point, and it is not my fault, of course, that the Sergeant-at-Arms has not reported or been able to bring the witnesses here.

SERGEANT-AT-ARMS LOU MARTIN: They will be here at 10 o'clock to-morrow morning.

MR. CATOR: I desire to use the remainder of these witnesses from Downieville, and possibly one of those witnesses who was called to-night if he is in the city—and Mr. Schlesinger will arrive here—to put those witnesses on.

THE CHAIRMAN: Has Mr. McKenzie or Mr. Smith reported here?

MR. CATOR: I have seen them, and I fear that they have labored under some misimpression in regard to their going away.

THE CHAIRMAN: Did you excuse them, Mr. Sergeant-at-Arms?

MR. MARTIN: I did not excuse them, but I understood they were excused by Mr. Cator to-day—dismissed.

MR. CATOR: I am not aware of it. Among so many witnesses I am not aware of having excused them; but in any event, with the exception of Mr. Schlesinger and the witnesses from Downieville, I would close this line of testimony. It is not my fault that the witnesses are not here, because the Sergeant-at-Arms has not yet returned. I do not wish to call any more from Bakersfield. I feel satisfied that the committee has had all they desire from one place, and the witnesses from the other place are the most important to us.

MR. SIMPSON: Have you any witnesses, Mr. Gould, at all, that you can call this evening?

MR. GOULD: I do not know that there are any here.

MR. SIMPSON: There is a subpoena returned from Mr. Beaty.

MR. GOULD: Returned when?

THE CHAIRMAN: February 7th.

MR. GOULD: I do not know whether he is in the room or not.

MR. MARTIN: Yes, he is here.

THE CHAIRMAN: Mr. Sergeant-at-Arms, did I understand you to say that Mr. Smith and Mr. McKenzie were excused?

MR. MARTIN: Mr. Smith was excused. I don't know anything about Mr. McKenzie. He informed me this afternoon that he had been excused.

THE CHAIRMAN: I would suggest to counsel hereafter, on to-morrow night or the night after—the next night that we continue the investigation—that they deliver to the Sergeant-at-Arms a list of the witnesses that they desire to put on the stand, so that he may have them in readiness and we will not have to wait.

MR. CATOR: I did so last evening, and we got on rapidly, but these witnesses seem to have got scattered to-day, and I do not know what the cause is.

THE CHAIRMAN: We will see that these witnesses who were to appear do not get any per diem for not testifying. Is Mr. Beaty in the room?

MR. NICOL: I would issue an attachment for that witness.

THE CHAIRMAN: Why is he not here? He was subpoenaed to be here at 8 o'clock to-night.

MR. MARTIN: He does not seem to be in the room.

THE CHAIRMAN: Was he here this evening?

MR. MARTIN: Yes, sir; twenty minutes ago.

THE CHAIRMAN: Have you any other witness?

MR. McNAB: None.

MR. GOULD: We have none here.

MR. McNAB: We have subpoenaed our witnesses for to-morrow night.

THE CHAIRMAN: Have you got anybody else you want to put on to-night?

MR. CATOR: No. I can finish with these witnesses very briefly, and I desire a consultation with other witnesses, and I would be doing an injustice if I were to put any one else on the stand to-night. I had not prepared for it, and I can examine these witnesses if they arrive in very short order. If they do not arrive, I will close the matter and go without any more witnesses. As far as I am concerned, I would like to examine these three or four from Downieville, if they arrive here, and Mr. Schlesinger, and can do that in a very short time.

THE CHAIRMAN: I understand that you desire to have Mr. Corbin here to-morrow night?

MR. CATOR: There was an understanding that he should be here. Mr. Copeland is the party who insists on asking him questions. I have myself finished my cross-examination, and do not desire to ask him anything more.

THE CHAIRMAN: Then he will be here to-morrow night?

MR. CATOR: If Mr. Copeland desires to ask him any more questions, all right.

MR. SIMPSON: Do you desire to call any of these other witnesses who have been subpoenaed on behalf of the accused? There are some subpoenas here, unreturned for witnesses whom you have not called for yet.

MR. CATOR: Yes, sir; we over-subpoenaed in number, but by reason of the limitation they have been excused, except Mr. McKenzie. I was obliged to do that in order to save my right to examine any one from Downieville. That is all.

THE CHAIRMAN: I desire to announce that the witnesses that have been subpoenaed are expected to be here at the time that they are subpoenaed, or to offer a valid excuse, and if they are not here, they will be presented before the committee and have to show some reason why they are not here, and it is among the possibilities that they may be taken before the Senate for the contempt of the Senate. This committee does not want to be interfered with in this investigation, and those witnesses who are subpoenaed to be here are expected to be here, unless they are excused.

(On motion of Mr. Ralston duly seconded, an adjournment was taken until to-morrow, Wednesday, February 8, 1905, at 8 P. M.)

EIGHTH SESSION.

WEDNESDAY, February 8, 1905, 8 P. M.

THE CHAIRMAN: The committee will come to order. Which side desires to put on the first witness?

MR. CATOR: Mr. Bert Schlesinger was subpoenaed, but I have had no word from him.

THE CHAIRMAN: Mr. Bert Schlesinger said he would be here to-night—that he would leave on the 5 o'clock train from San Francisco, and would be here about 10:40. Mr. McIsaacs also telephoned me.

MR. CATOR: When the committee is ready to proceed, I will call Senator Emmons, if the committee has no other order of business.

THE CHAIRMAN: Mr. Cator, have you any objection if the attorneys for the prosecution of this case—we will call it—if they have any character witnesses to put on, have you any objection to their being put on now, and closing up that part of the case?

MR. CATOR: I have not the slightest objection to any order of business that the committee thinks will facilitate this hearing.

MR. SIMPSON: We do not wish to interfere with your case at all, but as a matter of accommodation we would like to have these witnesses disposed of as soon as possible.

THE CHAIRMAN: Have you any gentlemen here—

MR. McNAB: We have.

THE CHAIRMAN: That you desire to put on in that connection? I understand there are some gentlemen here from San Francisco who would like to get away.

MR. CATOR: It is entirely agreeable to us to have them accommodated.

THE CHAIRMAN: It seems to the committee it would clear up that part of the case.

MR. GOULD: Would you ask Mr. Tichenor to step forward, and I would ask that James G. Maguire be called.

TESTIMONY OF JAMES G. MAGUIRE.

Sworn.

MR. GOULD: Q. Mr. Maguire, where do you reside? A. San Francisco, California.

Q. And your occupation? A. Attorney at law.

Q. You are the James G. Maguire whose name is familiar to the people of this state? A. I don't know, sir. I suppose they are somewhat familiar with my name.

Q. You are the James G. Maguire who was candidate for Governor a short time since? A. Yes, sir.

Q. I simply want to identify you. A. That is a subject that I do not care to allude to very often.

Q. Judge, do you know George Tichenor? A. Yes, sir.

Q. Do you know what George Tichenor's reputation is for truth and veracity in the City and County of San Francisco? A. Yes, sir.

Q. Will you state, is it good or bad? A. Good.

MR. GOULD: That is all.

Cross-Examination.

MR. CATOR: Q. San Francisco is a city, as we suppose, of about four hundred thousand? A. Four hundred and twenty-five thousand, I think they claim.

Q. How long have you known him? A. About two years.

Q. Have you had any particular association with him in a social sense? A. No social acquaintance with him; simply a business acquaintance.

Q. Are you familiar with his associates as a rule—those that he associates with day and night elsewhere, except when you have seen him? A. I can't say that I am.

Q. And your knowledge is limited to what you have known of him in San Francisco? A. Well, no; it is not limited to that; but I have known of him in San Francisco to a considerable extent during those two years. My principal business connection with him was outside of San Francisco.

Q. You had him transact some business for you, did you? A. Yes, sir; he was employed—has been employed in cases in which I was attorney.

Q. And it is on that that you base your opinion, is it not? A. In part only.

Q. Did you ever call him as a witness? A. Never.

Q. In any litigation? A. No, sir.

Q. Never had any occasion to use his evidence? A. Never.

MR. CATOR: That is all.

MR. GOULD: That is all, Judge. Thank you.

TESTIMONY OF D. S. HIRSHBERG.

Sworn.

MR. GOULD: Q. Mr. Hirshberg, where do you reside? A. San Francisco.

Q. How long have you resided in San Francisco? A. About four years.

Q. Prior to that time, where did you reside? A. Oakland.

Q. And prior to that time? A. I was born in Oakland; no prior to that.

Q. Are you the D. S. Hirshberg who was the manager of the Home up here at Ione? A. Yes, sir.

Q. What is your occupation? A. Attorney-at-law.

Q. Do you know George Tichenor? A. I do.

Q. How long have you known George Tichenor? A. Twenty-seven or twenty-eight years.

Q. Where in this State? A. In Oakland and in San Francisco.

Q. Do you know what Mr. Tichenor's reputation for truth and integrity is in the city of Oakland and in the city of San Francisco?

MR. JACOBS: Just a moment, if you please. There is no evidence here that Mr. Tichenor ever resided in Oakland, is there? I think that part of the question should be eliminated, inasmuch as there has been no testimony here to that effect.

MR. SIMPSON: I think Mr. Tichenor's testimony was that he conducted a cigar store in Oakland for a number of years.

MR. JACOBS: That slipped my mind; I did not recall it.

MR. GOULD: Will you please read the question, Mr. Reporter?
A. (After question read.) I think I do—particularly in the city of Oakland.

MR. GOULD: Q. What is it, Mr. Hirshberg?

MR. JACOBS: We submit that the witness is not qualified. He says he thinks he does, and his testimony does not show that he knows.

THE WITNESS: I will change that by saying that I do.

MR. JACOBS: That is better.

MR. GOULD: Thank you. State what it is, Mr. Hirshberg. A. Good.

MR. GOULD: Take the witness.

Cross-Examination.

MR. CATOR: Q. Have you had occasion to employ him yourself? A. No, sir.

Q. Are you familiar with the detectives that he associates with in that line of business? A. I can't say that I am.

Q. Have you ever had occasion to know anything about the manner in which he worked up testimony in cases, and gave evidence? A. No.

MR. CATOR: That is all.

MR. GOULD: That is all, Mr. Hirshberg.

TESTIMONY OF H. A. BLODGET.

Sworn.

MR. GOULD: Q. Mr. Blodget, where do you reside? A. Bakersfield, California.

Q. How long have you resided in Bakersfield? A. Thirty years.

Q. What is your occupation, Mr. Blodget? A. I am producing oil.

Q. And your residence is in Bakersfield? A. It is.

Q. I will ask you whether or not you knew Mr. Tichenor at the time he was in Bakersfield—Mr. Hartling, I should have said, at the time that he resided in Bakersfield? A. I did.

Q. For how long a time did you know him? A. Why, about three years.

Q. Do you know what the reputation of Mr. Hartling—

MR. CATOR: I would suggest, Mr. Gould, that you include general reputation. We always ask that, and that is the rule.

MR. GOULD: Q. Do you know what the reputation of Mr. Hartling is in the county of Kern?

MR. JACOBS: We object to that on the ground that the question is not a proper one.

MR. CATOR: The rule, Mr. Chairman, I insist—

THE CHAIRMAN: Objection sustained.

MR. GOULD: Q. Do you know what the general reputation of Mr. Hartling is in the city of Bakersfield and the county of Kern for truth and integrity? A. I do not remember that I ever heard his reputation discussed during all my acquaintance with him.

Q. Never heard his reputation discussed during your acquaintance with him? A. Not that I remember.

Q. Did you ever hear his reputation for truth and integrity questioned, during that time?

MR. CATOR: I object to that. The question is whether he knows his general reputation; not whether he ever heard it questioned.

THE CHAIRMAN: The objection is sustained.

MR. GOULD: I think, may it please the committee, that that is a perfectly proper question. Where a witness states that he never heard the reputation discussed, the books hold, as I understand it, that that is the best reputation that a man can have—a reputation of such a character that it has never been called in question. I insist that the question is a proper one, especially in view of this particular controversy.

MR. SIMPSON: As I understand, the form of the question is established by law. There can be no question about the manner in which these impeaching witnesses on the question of reputation must be questioned, and your question in form is more in the nature of a cross-examination of your own witness. I think the question for that reason is improper.

MR. GOULD: The ruling of the committee is final, so far as I am concerned.

MR. SIMPSON: I would suggest that the objection be sustained.

THE CHAIRMAN: So ordered.

MR. GOULD: That is all.

MR. CATOR: That is all.

TESTIMONY OF H. D. MORTON.

Sworn.

MR. GOULD: Q. Mr. Morton, where do you reside. A. San Francisco.

Q. What is your occupation? A. President of W. T. Garratt & Co., and also proprietor of Morton's Special Delivery.

Q. How long have you lived in San Francisco? A. All my life.

Q. Do you know George Tichenor? A. Yes, sir.

Q. How long have you known George Tichenor? A. Three or four years.

Q. Do you know what his reputation is in the city of San Francisco for truth and veracity?

MR. JACOBS: We object to that on the ground that it is not the proper question.

MR. GOULD: General reputation, then? I withdraw the question. A. So far as I know, it is good.

MR. CATOR: I move to strike the answer out on the ground that it is not responsive.

MR. GOULD: Q. Do you know what his general reputation is? A. I don't know anything against him.

MR. CATOR: I object and move to strike it out. It is the same thing. A man may live in San Francisco and not know anything against a man who is a very bad man.

MR. GOULD: Q. What has been the nature of your acquaintanceship with Mr. Tichenor? A. I have employed him in business there.

Q. The nature of your connection with him there had been that of employer and employé? A. Yes, sir.

MR. ALEXANDER: We object to that line of questioning.

MR. GOULD: I have a right to show the intimacy, to show the acquaintance this gentleman has with him.

MR. JACOBS: If the committee will pardon me, I suggest when any of these questions are asked of this witness, it is not competent unless this witness is qualified for stating he does know the general reputation in this community.

MR. SIMPSON: Is there any ruling desired on that?

MR. JACOBS: Yes, sir.

MR. SIMPSON: The last question?

MR. JACOBS: Yes, sir.

MR. SIMPSON: Read the last question and answer, Mr. Reporter.

MR. CATOR: I do not move to strike out the last question, that he merely employed him, but I move to strike out: "I don't know anything against him."

MR. SIMPSON: I would suggest that you be prompt with your objections.

MR. CATOR: I was.

MR. SIMPSON: Was it the answer next before the last?

MR. CATOR: Whichever one it was he answered, I object to it unless—when he said he did not know anything against him. I objected at the time.

MR. ALEXANDER: The reporter can now refer to his notes.

(Here the reporter read the following: "Mr. Gould: Q. Do you know what his general reputation is? A. I don't know anything against him.")

MR. JACOBS: That we move to strike out.

MR. SIMPSON: I do not think that the answer was responsive to the question, and I suggest that the motion be granted.

THE CHAIRMAN: The motion is granted.

MR. GOULD: Q. Do you know the general reputation of George Tichenor in San Francisco for truth and veracity?

MR. SIMPSON: That question must be answered by yes or no.

A. In a personal way?—excuse me.

Q. The question calls for a direct answer, Mr. Morton. A. No.

MR. GOULD: That is all.

MR. CATOR: That is all.

TESTIMONY OF B. F. KEMBLE.

Sworn.

MR. GOULD: Q. Where do you reside, Mr. Kemble? A. San Francisco.

Q. How long have you resided in San Francisco? A. Six years.

Q. And what is your occupation? A. Superintendent of Pinkerton's National Detective Agency.

Q. How long have you occupied that position? A. A little over two years.

Q. Do you know George Tichenor? A. Yes, sir.

Q. How long have you known him? A. About six years.

Q. Do you know what his general reputation is in the City and County of San Francisco for truth and veracity? A. Good.

MR. JACOBS: We submit that that answer should be stricken out until the witness is qualified.

MR. GOULD: Q. Do you know, yes or no? A. Yes, sir.

Q. What is his reputation? A. Good.

MR. GOULD: That is all.

Cross-Examination.

MR. CATOR: Q. You are superintendent of a detective agency there?
A. Yes, sir.

Q. And employed Tichenor at one time? A. Yes, sir.

Q. Not in your employ now? A. No, sir.

Q. Your knowledge of his reputation is not alone based on what he did in that capacity, is it? A. Yes, sir.

Q. Your own judgment, and not what you have heard the public say generally, outside of that? A. No, sir.

MR. CATOR: That is all.

TESTIMONY OF PHILIP CONRADI.

Sworn.

MR. GOULD: Q. Mr. Conradi, where do you live? A. Oakland.

Q. And what is your business? A. Merchant.

Q. How long have you lived in Oakland? A. Since '79.

Q. Do you know George Tichenor? A. Yes, sir.

Q. What is the nature of your acquaintance with him? A. I used to be associated in business with him.

Q. How long ago was that? A. That is twenty-five years ago—'79—'79 and '80.

Q. And have you kept up your acquaintance with him ever since that time? A. Not of late years; I have met him occasionally.

Q. Do you know what Mr. Tichenor's general reputation is in the city of Oakland for truth and veracity? A. Well, at the time he lived there, it was good.

MR. JACOBS: We submit that the witness should be instructed not to answer until he is qualified.

MR. GOULD: Q. Just state whether or not you know.

MR. SIMPSON: The answer should be yes or no to that question.

MR. GOULD: Yes, sir. The question is, do you know what the reputation of Mr. Tichenor is in the city of Oakland for truth and veracity?

A. As far as I know, it is good.

Q. Just say yes or no. A. Yes, sir.

Q. What is it? A. Good.

Cross-Examination.

MR. CATOR: Q. Twenty-five years ago you and he were in business?
A. Yes, sir.

Q. And since that time you have not seen very much of him?
A. No.

Q. Eh? A. No.

Q. And since that time, have you heard many people speak about his reputation— A. (Interrupting.) Not very many.

Q. —for truth and veracity? A. No, sir.

Q. Can you name the persons you have ever heard say his reputation for truth and veracity was good? A. Could I name them?

Q. Yes, sir. A. That would be a hard matter for me to do.

MR. CATOR: That is all.

MR. GOULD: That is all.

TESTIMONY OF F. W. THOMPSON.

Sworn.

MR. GOULD: Q. Where do you reside? A. San Francisco.

Q. And what is your occupation, Mr. Thompson? A. Railroad agent.

Q. Railroad agent of what company? A. For the Rock Island.

Q. For the Rock Island? A. System.

Q. How long have you lived in that city? A. About five years, the last period.

Q. Do you know George Tichenor? A. I do.

Q. And how long have you known him? A. About seven years.

Q. Have you ever been associated in business in any way with him, either as employé or employer? A. Indirectly.

Q. I will ask you whether or not you know the reputation —

MR. CATOR: Now, general.

MR. GOULD: Q. General reputation—thank you—of George Tichenor for truth and veracity, in that city? A. Well, I would like to state that I have seen but very little of Mr. Tichenor for some four or five years, except casually; but some six or seven years ago he was indirectly in the employ of the Rock Island road, at which time I came in contact with him.

Q. At that time, do you know what his reputation was for —

MR. CATOR: One moment.

MR. GOULD: Q. General reputation was—for truth and integrity?

MR. ALEXANDER: One moment.

THE WITNESS: Where?

MR. GOULD: Q. In that city? A. That was in Los Angeles.

Q. Then in Los Angeles? A. I considered it good.

MR. JACOBS: We move to strike it out until he is qualified.

MR. GOULD: Just simply say yes or no. A. Yes, sir.

Q. If you know, say yes. A. Yes, sir.

Q. What was such reputation? A. Well, I don't know —

Q. (Interrupting.) Good or bad? A. Good.

MR. GOULD: That is all.

Cross-Examination.

MR. CATOR: Q. Was his reputation there in question, that you heard people discuss it? A. Only as he came in contact with me in a business way.

Q. With Tichenor? A. Yes, sir; and others identified with our interests.

Q. What was it about his reputation that you heard discussed, that causes you to say you know his general reputation for truth and veracity? A. His general attention to business.

Q. You did not hear men discuss whether he was truthful and would tell the truth, or whether he would not? A. There was no occasion for it.

Q. You did not hear that discussed ever? A. No, sir.

MR. CATOR: That is all.

TESTIMONY OF ANDREW CARRIGAN.

Sworn.

MR. GOULD: Q. Mr. Carrigan, where do you reside? A. San Francisco.

Q. What is your occupation, Mr. Carrigan? A. Vice-President of the Dunham, Carrigan & Hayden Company.

Q. How long have you resided in San Francisco? A. The better part of thirty-eight years.

Q. During that time have you become acquainted with George Tichenor? A. I have, sir.

Q. How long have you known Mr. Tichenor? A. Oh, about five or six years.

Q. Do you know what the general reputation is of Mr. Tichenor in San Francisco for truth and veracity? A. In answer to that question, is a man answering on his own knowledge and belief?

Q. Answering on what people say. A. I should say yes, then.

Q. What is such reputation—good or bad?

MR. CATOR: One moment. I want him to say yes or no.

MR. GOULD: He did; he said yes, sir.

MR. CATOR: All right.

MR. GOULD: Q. What is his reputation—good or bad?

MR. CATOR: General reputation.

THE WITNESS: I beg pardon—there was an interruption there.

MR. CATOR: I asked Mr. Gould to keep to the question, what is his general reputation.

WITNESS: Answering the same way that I answered, I say good.

MR. GOULD: That is all.

Cross-Examination.

MR. CATOR: How long have you known him? A. I should say five or six years.

Q. Did you hear people discuss whether he would tell the truth or not? A. Certainly not, sir.

Q. Never heard that discussed? A. Never heard the question raised about him at all.

Q. And do not know anything about his reputation, in regard to his being a detective or giving evidence, and whether or not he was charged with being truthful or untruthful in that respect? A. My experience has been only that of a personal nature with him in that capacity.

Q. In what capacity? A. In his capacity as a detective.

Q. Simply in the work that he has done for you? A. Yes, sir.

Q. You never have had occasion to use his testimony? A. Do you mean in a court of law? By proving a case—

Q. (Interrupting.) Yes, in a court of law? A. Not in a court of law.

Q. You never heard it discussed whether he would tell the truth or not? A. Certainly not.

MR. GOULD: Q. You have always found Mr. Tichenor good, faithful, and true in your employment, have you?

MR. CATOR: That is not leading.

MR. GOULD: Not exactly.

MR. ALEXANDER: We object to that question.

THE CHAIRMAN: The objection is sustained.

MR. GOULD: Q. Have you acted in the past on information furnished you by Mr. Tichenor?

MR. ALEXANDER: Same objection.

THE CHAIRMAN: Objection sustained by the committee.

MR. GOULD: That is all.

MR. CATOR: That is all.

TESTIMONY OF J. O. JONES.

Sworn.

MR. GOULD: Q. Mr. Jones, where do you reside? A. Alameda.

Q. How long have you resided in Alameda? A. A little over three years; that is, I have been away most of the time; I have been in Central America.

Q. And where did you reside before that time, before you went to Alameda? A. I was—I resided for a great many years in Sierra County.

Q. What part of Sierra County did you reside, Mr. Jones? A. Forest City and Downieville.

Q. Forest City and Downieville? A. Yes, sir.

Q. How long did you reside in Forest City? A. About twenty years.

Q. And how long in Downieville? A. I was there about two years.

Q. When did you leave Sierra County? A. I left the county about seven years ago.

Q. What was your occupation in Sierra County? A. I was superintendent of mines up there, and mining generally.

Q. Did you know Henry Hartling? A. Yes, sir.

Q. How long have you been acquainted with Henry Hartling? A. I have been acquainted with Henry Hartling since '76.

Q. Since '76? A. Yes, sir.

Q. Did you know him in Sierra County? A. I knew him in Sierra County and I have known him in San Francisco.

Q. You have known him in both places? A. In both places; in Downieville, also.

Q. You have known him continuously, then? A. I have known him continuously all that time.

Q. Do you know what the general reputation of Harry Hartling has been during those years for truth and veracity in Sierra County and in San Francisco? Just answer yes or no? A. In Sierra County, his reputation—

MR. JACOBS: Just a moment; yes or no.

WITNESS: You want to know whether it is good or not?

MR. GOULD: No, sir.

THE WITNESS: Perhaps I did not understand you.

Q. What I want to have is an answer, yes, or no, as to whether or no you know what his general reputation is, as I have suggested? A. Well, all the time I was in Sierra County, he was in the same town with me.

Q. Answer yes or no. A. Yes, sir.

Q. Is his reputation in those places good or bad? A. Good.

MR. GOULD: Take the witness.

Cross-Examination.

MR. CATOR: Q. Do you mean to say it is good in both places, speaking for both places at once? A. San Francisco and up there?

Q. Yes, sir. A. I don't know so much about San Francisco. I have been away. But in Sierra County—

Q. (Interrupting.) In San Francisco County, you do not know what his general reputation is among people about that? A. I do not, because I never heard it questioned.

Q. In Sierra County have you heard the subject of his character for truth and veracity talked about? A. No, sir.

Q. What? A. No; not much.

Q. How much? A. Well, generally speaking, I have heard everybody speak well of him. I never heard anybody speak ill of him up there.

Q. Did you ever hear him talked about—his character for truth and veracity—in that county? A. No, sir.

Q. Never heard that talked about? A. No, sir.

Q. Did you ever hear it stated that he was charged with having sworn falsely in the Aroni case? A. I have heard it said so, but I don't know it.

MR. CATOR: That is all.

MR. GOULD: That is all.

TESTIMONY OF R. F. DEL VALLE.

Sworn.

MR. GOULD: Q. Senator, where do you reside? A. City of Los Angeles.

Q. And how long have you resided in the City of Los Angeles? A. Most all my life, sir.

Q. You were formerly for some years Senator for that locality in the State Legislature? A. Yes, sir.

Q. Do you know George Tichenor, Senator? A. Yes, sir.

Q. How long have you known him? A. About two years.

Q. Do you know what the general reputation of George Tichenor is in the City of Los Angeles for truth and veracity? A. Yes, sir.

Q. What is it? A. Good.

MR. GOULD: Take the witness.

Cross-Examination.

MR. CATOR: Q. Have you heard his reputation generally discussed by citizens there, as to whether he would tell the truth or not? A. I have heard it commented on.

Q. Heard it commented upon? A. Yes, sir.

Q. What do you mean by "commented"? A. Only one side to the opinion.

Q. How? A. Only one opinion in regard to it.

Q. How did that happen to arise? A. At the time he was employed in cases, as to the truth that he made about the services that he rendered.

Q. To whom? A. To other people.

Q. Who were the people? A. I had one case for some people in New York, for instance—were commenting on his reputation.

Q. What? A. Some people in New York who commented on his reputation.

Q. The people were in New York, were they? A. No, sir; they were from New York

Q. From New York? A. Yes, sir, and had employed him.

Q. Clients of yours? A. Yes, sir.

Q. You heard them speak of it? A. Yes, sir.

Q. How did you come to say that you knew his general reputation in the city of Los Angeles in regard to that? A. I have heard a great many people speak about it.

Q. About his character for truth and veracity? A. Yes, sir.

Q. How came they to speak about it? Was it in question? A. Not in question. They commented on the valuable services he had rendered as an officer and the truth of the statements he made to them.

Q. To whom? A. To these various people with whom I spoke.

Q. Did you ever use his testimony in court? A. No, sir.

Q. Did you ever hear it discussed among citizens as to whether—anything about his testimony in court — A. (Interrupting.) No.

Q. As to whether he had sworn to a truth or falsehood in court. A. No, sir.

MR. CATOR: That is all.

MR. GOULD: That is all.

TESTIMONY OF FRANK G. FINLAYSON.

MR. GOULD: Q. Where do you reside? A. In the city of Los Angeles.

Q. How long have you resided there? A. Eighteen years.

Q. What is your occupation, Mr. Finlayson? A. Attorney at law.

Q. How long have you been engaged in that occupation? A. Twenty years.

Q. Are you the Frank Finlayson who was a member of the Legislature some years since? A. Yes, sir.

Q. I will ask you, Mr. Finlayson, if you know George Tichenor? A. I do.

Q. How long have you known him? A. Two years about the first of May next.

Q. Do you know what the general reputation of George Tichenor is in the City of Los Angeles, for truth and veracity? A. I know what it is for truth, honesty and integrity.

Q. State what it is. A. Good.

MR. GOULD: Take the witness.

Cross-Examination.

MR. CATOR: Q. How came you to be acquainted with Mr. Tichenor? A. About two years ago the Continental Building and Loan Association employed the firm of which I was then a member to prosecute certain parties there, charged with certain felonies. At that time I had Mr. Tichenor also employed as a detective in those cases. I saw a great deal of him during the following twelve months from about the first of May, 1903, until about the first of May or June, 1904.

Q. Los Angeles is a city of a hundred thousand—has been practically during the last two years? A. No. If you were from Los Angeles, you would say at least a hundred and fifty thousand.

Q. I am not from there, but I would be willing to be; I have respect for it.

MR. GOULD: As a special favor to Los Angeles.

MR. CATOR: Q. Among those hundred and fifty thousand people, how did you happen to hear the general reputation of Mr. Tichenor discussed as to truth and veracity? A. I do not suppose that he is acquainted with a hundred and fifty thousand people in that city, Mr. Cator, but he has a circle of acquaintances, you see, and I saw so much of him during that time that I think I am acquainted myself with almost all of his acquaintances there.

Q. Did you ever use his testimony in court in those cases? A. No; he did not testify as a witness.

Q. Have you heard the matter discussed as to whether he told the truth in the manner of giving his evidence as a detective, generally? A. No, not that; but I have discussed and heard discussed his character as a man of honor and integrity.

Q. But as to his methods as a detective and his testimony in court, you have not heard it discussed, have you? A. Yes, sir; I have heard his methods as a detective discussed in this way: That those with whom I came in contact in this case, the District Attorney himself, his deputies and the detective—in the District Attorney's office—and myself, frequently discussed his ability as a detective, and likewise the manner in which he would confine himself to the facts.

Q. In those cases? A. In those cases; yes, sir.

Q. That is all. A. In other words, we concluded that he was an exceedingly conservative man.

Q. That is, you concluded—you and the District Attorney? A. Myself and these other gentlemen who were associated with me in the case.

Q. And that is part of the discussion on which you based your opinion? A. No; that is not all of it.

Q. I did not say all; I say that is part? A. That is part; yes, sir.

MR. COPELAND: Were you guilty of voting for Mr. Gould for Speaker of the Assembly when you were here? A. I plead guilty to that, also.

MR. COPELAND: That is all.

TESTIMONY OF A. J. BRANDISH.

Sworn.

MR. NICOL: Q. Where do you reside, Captain? A. In Los Angeles.

Q. How long have you lived there? A. Eighteen years.

Q. Do you know George N. Tichenor? A. I do.

Q. How long have you known him? A. That is about five years.

Q. Do you know what his general reputation for truth, honesty, and integrity is in the City of Los Angeles? A. I do.

Q. What is it—good or bad? A. Good.

Q. What position do you occupy, if any, in that city, Captain? A. Captain of Detectives—Police Department.

Q. How long have you occupied that position? A. It is going on eight years.

MR. NICOL: Your witness, gentlemen.

Cross-Examination.

MR. CATOR: Q. How long did he reside in Los Angeles? A. I don't think he ever resided there continually.

Q. He has been there off and on? A. Yes, sir.

Q. And you are captain of a detective organization? A. Of the Police Department.

MR. CATOR: That is all.

MR. NICOL: That is all, Captain.

TESTIMONY OF H. D. BAILEY.

Sworn.

MR. NICOL: Q. Mr. Bailey, where is your home? A. Los Angeles.

Q. How long have you lived there? A. One year and one day.

Q. One year and one day? A. Yes, sir.

Q. During that time, have you known George N. Tichenor? A. Yes, sir.

Q. Where did you live prior to going to Los Angeles? A. San Francisco.

Q. How long had you lived in San Francisco? A. About ten years.

Q. Did you know George N. Tichenor in that place, also? A. Yes, sir.

Q. What is your business? A. I am the Superintendent of the Pinkerton Detective Agency at Los Angeles.

Q. During the time that you have known George N. Tichenor in these two places of which you speak—

MR. CATOR: I suggest you separate them.

MR. NICOL: I will present my question in my own form, and if you object, present your objection to the committee. I think that is a more orderly thing to do.

Q. In each of these places in which you have known him, have you known the general reputation of George N. Tichenor for truth, honesty and integrity? A. I have.

Q. Would you state whether it was good or no? A. Good.

Q. Would you believe him under oath?

MR. CATOR: I object to that.

THE CHAIRMAN: You asked that continually the other night.

MR. CATOR: That is when you are impeaching, and not sustaining, a reputation—I withdraw the objection.

THE CHAIRMAN: What is sauce for the goose is sauce for the gander.

MR. NICOL: That is all.

Cross-Examination.

MR. CATOR: Q. What did you say your name was? A. Bailey.

Q. And you are connected with the Pinkerton detective agency? A. Yes, sir.

Q. And have been in San Francisco and Los Angeles both? A. Yes, sir.

Q. How long has Mr. Tichenor lived in Los Angeles? A. I don't know how long he lived there; I didn't know he had a permanent residence there.

Q. Been there quite often? A. He is there quite often; seen him there a number of times during the last year.

Q. Been there as a detective? A. Yes, sir.

Q. That was his business? A. A portion of the time he was in Los Angeles, it was.

Q. Did you ever hear his reputation for truth and veracity discussed

outside of detectives? A. I never heard any discussion in regard to his veracity, neither have I heard it impeached anywhere.

Q. You never heard any discussion in regard to his reputation for truth? A. No, sir; I never heard any discussion in Los Angeles.

Q. In San Francisco, you occupied the same position, as a detective? A. Well, not precisely. I was Assistant Superintendent in San Francisco, and I am Superintendent at Los Angeles.

Q. I mean you are on the detective force? A. Yes, sir.

Q. Did you, outside of detectives, hear citizens and the public generally in San Francisco discuss his reputation for truth? A. I never heard his reputation discussed in regard to truth in any way at all.

MR. CATOR: That is all.

TESTIMONY OF F. A. BALDWIN.

Sworn.

MR. NICOL: Q. Mr. Baldwin, where is your residence? A. San Francisco.

Q. How long have you lived there? A. Thirty years.

Q. What is your business? A. Mercantile.

Q. How long have you been engaged in that business? A. Twenty-five years.

Q. Do you know George N. Tichenor? A. I do.

Q. How long have you known him? A. Twenty-nine years.

Q. During that time, where have you known him? A. San Francisco.

Q. During that time, have you come to know, and do you now know what his reputation for truth, honesty and integrity in that community is?

MR. JACOBS: I submit, general reputation.

MR. NICOL: Q. General reputation? A. I do; yes, sir.

Q. What is it—good or bad? A. Good.

MR. NICOL: Your witness.

Cross-Examination.

MR. CATOR: Q. How long has he lived in San Francisco—of that twenty-nine years? A. Well, I don't know exactly; about, I should say, fifteen or sixteen years, probably.

Q. When did you learn his reputation—the question of whether he had a character for truth or not—discussed? A. I could not tell you the exact date.

Q. Did you ever hear anybody discuss whether he would tell the truth or not? A. Yes, sir.

Q. Who? A. Well, do you want me to tell you?

Q. Yes, sir; who were the persons? A. It might be John Smith.

Q. John Smith, a man. What was John Smith's business? A. General business.

Q. General business? A. Yes, sir.

Q. Was he a merchant? A. Yes, sir.

Q. Whereabouts? A. In San Francisco.

Q. What kind of a mercantile business? A. Furniture, carpets, draperies.

Q. Whom was he discussing it with? A. Me.

Q. How did you happen to be discussing it? A. In a manner that was necessary for us to—for reasons—good reasons.

Q. Good reasons? A. Yes, sir.

Q. You were discussing whether he would tell the truth or not? A. Not necessarily; no.

Q. What? A. Not necessarily that; no, sir.

Q. You were not necessarily discussing whether he would tell the truth? A. No; it led up to that afterwards.

Q. John Smith said he would? A. Yes, sir. Would tell the truth.

Q. Who else besides John Smith did you ever hear discuss it? A. I don't remember.

MR. CATOR: That is all.

MR. NICOL: That is all.

MR. GOULD: I think, gentlemen of the committee, that these are all of the gentlemen who are here now that have been subpoenaed.

THE CHAIRMAN: Do you expect any others, Mr. Gould?

MR. McNAB: To-morrow night.

MR. GOULD: We will have some two or three later in the evening, and we expect a number of others to-morrow night. The Sergeant-at-Arms did not succeed in subpoenaing them in time to get here to-night.

THE CHAIRMAN: Have you any character witnesses, Mr. Cator, you desire to put on?

MR. CATOR: Only one, in addition to Mr. Schlesinger. I believe I have examined nineteen.

MR. RALSTON: Nineteen; that is right.

MR. CATOR: I wish to have Mr. Bert Schlesinger and one other.

THE CHAIRMAN: Is he here?

MR. CATOR: No. He is the one I spoke of this morning. I am ready to go ahead with the other evidence.

MR. GOULD: I would like to ask at this time whether or not there are to be witnesses from Downieville here on evidence as to character.

MR. CATOR: Well, I have stated that I only intend to offer two more, and neither one of them would be here from Downieville. Mr. Bert Schlesinger now resides in San Francisco, and the witnesses from Downieville—there were some here—I do not know but what you met them before I did.

MR. GOULD: No, I did not meet them, but I assume, however, that you did meet them. I would like to ask for a subpoena for those three witnesses from Downieville—have you their names?

MR. CATOR: No.

MR. GOULD: I would like to have them called, then.

MR. CATOR: Whom for?

MR. NICOL: We will take chances on that, even with your witnesses, even though we have not seen them.

MR. ALEXANDER: You might not have seen them, but may be somebody else did.

MR. COPELAND: You were not looking, Mr. Nicol?

THE CHAIRMAN: The return made by the Sergeant-at-Arms was for Henry Spalding, Albert Meyer, George F. Taylor, and Charles Meany. Judge Smith sends an affidavit; you have that?

MR. SIMPSON: Yes, sir.

THE CHAIRMAN: Asking to be excused, which excuse I think the committee will accept. He has to attend to some cases.

MR. SIMPSON: I want to call your attention to the fact that you have really called twenty witnesses, including Mr. Littlejohn, who testified.

MR. CATOR: I have no objection. You may include him; I only want to call the other two. I think he was a first-class witness, and I am willing for him to be counted as two or three.

THE CHAIRMAN: Do I understand that you want to put these witnesses on the stand, Mr. Gould?

MR. CATOR: I am willing that they should put them on.

MR. GOULD: I ask that they be called.

THE CHAIRMAN: Henry Spalding, Albert Meyer, George F. Taylor and Charles P. Meany.

MR. NICOL: Were they excused?

MR. CATOR: They told me that they could not testify for either side in regard to this matter, and I told them as far as I was concerned, I had no further use for them.

MR. NICOL: They were from Downieville, where Mr. Hartling lived a while.

MR. ALEXANDER: Do you want to go into full particulars of the matter?

MR. NICOL: I am not speaking to you; I was addressing Mr. Cator.

MR. CATOR: I saw them, and they said they would not testify to the general reputation of Mr. Hartling. One said if he did he would testify to a divided matter, and after discussing the matter fully with them I stated I did not see that I could, under the rules, use them as character witnesses. I asked them if they had seen the other side and intended to testify for the other side, and they said they could not testify for either side, and I said, as far as I was concerned they were excused.

MR. NICOL: Was that the reason you suggested a while ago that I had seen them first—because they couldn't testify for either side?

MR. GOULD: We tried very hard to find these witnesses, but discovered as soon as they got to town they got to the Sergeant-at-Arms' room very speedily and then cleared out.

MR. SIMPSON: How many witnesses do you wish to call on this line, Mr. McNab?

MR. McNAB: There are no more here this evening.

MR. SIMPSON: How many more do you wish to call?

MR. GOULD: I think not exceeding ten. I presume that these witnesses who have already testified this evening may be excused from attendance on the committee.

MR. RALSTON: Yes, sir.

THE CHAIRMAN: Do you desire to have them in attendance any further?

MR. CATOR: Not at all.

THE CHAIRMAN: They are excused.

THE CHAIRMAN: I understood Mr. Copeland desired to cross examine Mr. Corbin, and we had Mr. Corbin brought here for that purpose. Do you desire to proceed with that now and finish that up?

MR. COPELAND: No; I do not care to do that, because we are ready to proceed with our defense now, and Mr. Corbin can remain here.

MR. McNAB: We would not like to have Mr. Corbin abandon his business for this; he is here now.

THE CHAIRMAN: It was at the request of Mr. Copeland, that you wanted to cross-examine him.

MR. McNAB: We brought him from San Francisco for that purpose.

THE CHAIRMAN: I think that is right, and if they desire to cross-examine Mr. Corbin, I think the proper time to do it is now.

MR. COPELAND: Mr. Chairman, if that is the view of the committee, I do not care to delay this matter at all by cross-examining Mr. Corbin. I thought after we had put in our defense, if Mr. Corbin was here, and it was convenient—I have not insisted on his being here.

MR. NICOL: Somebody has.

MR. COPELAND: I have not. I do not desire to cross-examine Mr. Corbin at this time.

MR. McNAB: Then he is excused?

THE CHAIRMAN: Does any member of the committee desire to cross-examine Mr. Corbin any further?

MR. RALSTON: Not now. We may later.

MR. SIMPSON: I do not myself.

MR. RALSTON: He will be in attendance all evening, will he not?

MR. McNAB: I think he will be in the city, where we can get him at any time.

THE CHAIRMAN: He will be in attendance all this evening?

MR. McNAB: Yes, sir.

THE CHAIRMAN: Proceed, Mr. Cator.

MR. CATOR: I will call Senator Emmons.

(Here Senator Emmons appeared before the committee and the Chairman started in to administer the oath to him.)

DISTRICT ATTORNEY A. M. SEYMOUR (interrupting): I did not intend to inject myself into this matter at all, but I feel, as the prosecuting attorney of this county at this time, I must object, and strenuously object, to swearing either of these accused Senators. Now, I do not care to express my personal opinion concerning what the evidence in this case shows thus far, but it is apparent to every man that the evidence thus far adduced in this case shows, to say the least, reasonable cause for believing that grave offenses against the laws of this State, and denounced as such by the penal statutes of this State, have been—

MR. CATOR (interrupting): I object to a gentleman—he has never consulted us. I have the highest respect for the District Attorney, although I have never met him personally. If he wishes to address himself to the legal reasons—if there is legal reason and cause to object to these people taking the stand, I have no objection to his calling the attention of the committee to it. I think there is an impropriety in his calling attention to the weight and effect of the evidence. This is not the proper time and place, and he must admit if there is any law or reason why he has a right to come here and object to these witnesses taking the stand—if he thinks a Senator whose honor is impeached before the bar of this Senate, and who is accused of taking bribes, and it is a question of giving the privilege to him, this Senate has adopted a resolution and appointed a committee to inquire into the conduct of its own members—if he is ready to present any reason why they should not offer themselves as witnesses in regard to their honor and integrity, let it be presented; but as to making any argument here to this committee or to the Senators or otherwise, as to what he deems individually that the evidence up to this time has proven, I have no idea that he really intends to do it. I cannot believe it. I think his remarks should be exclusive of that, and I have a very high regard for the gentleman,

with whom I have no personal acquaintance. I can not believe that he would attempt to do anything that would injure these Senators. Up to this time I have observed that he did not deem it his duty to take any exception that would prejudice either of these Senators, and he is entitled to great respect for it, for nobody supposes they are going to run away, and I say that you can not believe that he has any motive or intention of saying anything here to their prejudice; but in view of the few remarks he has thus far made about what is apparent, I think the committee should say that he restrict himself to the legal reasons.

MR. SEYMOUR: Mr. Chairman, if the gentleman will listen——

MR. SIMPSON: Mr. Chairman, I move that the District Attorney be permitted to address the committee, and that he be permitted to do so, and that in whatever remarks he makes that he do not discuss the case on its merits or in any way indulge in an argument.

MR. SEYMOUR: I did not intend——

THE CHAIRMAN (interrupting): It is moved and seconded that the District Attorney be permitted to address the committee, and that in his remarks he is not to discuss the matter now before the committee on its merits. If there is no objection, such will be the order. Hearing none, it is so ordered.

MR. EMMONS: Mr. Chairman, then while this discussion is going on, may I retire from the witness stand?

THE CHAIRMAN: If you so desire.

(Here Senator Emmons left the Senate Chamber.)

MR. SEYMOUR: As I said in the beginning, I do not care to express my personal opinion concerning what the evidence in this case shows, and if the gentleman who interrupted me will listen as patiently to me and as attentively to me as I did to him, probably I can show him, and show this committee, and show this audience some legal reasons why these witnesses should not be sworn to testify, but permitted here under the Senatorial courtesy to make whatever statements and answer whatever questions might be propounded to them. Without discussing the evidence in this case or the facts in this case, I think, as I said before—and that is not any discussion of the evidence in this case—that the evidence thus far at least shows reasonable cause for believing that grave offenses have been committed by at least two members of this body, and if that be the case, then they should be put upon their trial before a court and jury in a criminal proceeding. What is the legal effect of bringing these men here and swearing them and requiring them to testify? The matter is clearly and explicitly laid down in Section 304 of the Penal Code.

MR. SIMPSON: Will the gentleman permit an interruption?

MR. SEYMOUR: Yes, sir.

MR. SIMPSON: Mr. Seymour, do you know of any rule of law whereby these Senators being on trial here, and the investigation having narrowed down to their conduct, and the possible penalty as far as this investigation is concerned being their expulsion from the Senate—do you know of any rule of law whereby this committee for any reason can refuse to swear these men, they having presented themselves and desiring to testify in the case?

MR. SEYMOUR: These proceedings are unusual, and I do not know that I can point you to any specific rule of law, but the public interests and your duty to the people of the State of California require that the

hands of the prosecuting attorney and officials of this county should not be absolutely tied in case the evidence in this case shows that they ought to be put upon their trials and ought to suffer the punishment required by law, namely, imprisonment in the State Prison of this State and disqualification hereafter from holding any office of public trust.

What can this committee do and this Senate do, and what can this Senate mete out to these accused Senators in case the evidence shows they are guilty? All that this Senate can do is to expel them from the Senate; and what vote is required to do that? Two thirds of the votes of all the members elected. Four of them—of course they have four votes already, and all that is necessary is for them to have ten friends to rally to their support.

MR. CATOR: I want to ask, Mr. Chairman, if that is pertinent.

MR. SEYMOUR: That is pertinent, because I am addressing myself to the reasons that ought to guide this committee to refusing to have the Senators sworn and giving their testimony under oath. You all know that, notwithstanding all these kind of charges that have been made in the history of California, notwithstanding all these kind of investigations that have been held, it is a fact that the history of California shows that no member has ever been expelled from either house of the Legislature. Now, I say that if you swear these men, these accused, and if they answer any question under oath, they are absolutely absolved from hereafter being held to answer criminally or being subjected to any penalty or forfeiture concerning any fact or act concerning which they are required to testify. Now, I ask this committee, and I ask you in all seriousness, are you going to do that thing? Are you going to absolutely tie the hands of the prosecuting officials of this county?

MR. SIMPSON: Will the gentleman permit a question now?

MR. SEYMOUR: Certainly.

MR. SIMPSON: You have made objection, Mr. Seymour. What do you suggest to the committee? Do you suggest that this committee now adjourn without following the evidence down as far as we can, and that we deny these men a right to make any statement under oath?

MR. SEYMOUR: Yes, sir—under oath. Let them come here by the right of Senatorial courtesy and let them make any statement they desire.

MR. SIMPSON: But they are on trial here.

MR. SEYMOUR: And consider it under oath.

MR. SIMPSON: They are on trial. How can we refuse to swear them.

MR. SEYMOUR: If I were trying a case before you, and I made any statement of fact, you would say: "Mr. Seymour is not sworn, and I will accept his statement as though it were under oath." I do not know, gentlemen, whether you realize the importance of this thing or not, but the eyes of the whole people of the State of California are on you to-night. [Loud applause from the audience.]

You can not afford, as I have already said, to absolutely absolve these gentlemen from any further prosecution, in case the evidence warrants it, and that is what you will do, in my judgment, if you permit them to be sworn and take their testimony under oath in this proceeding, and that is all there is to it; and I say to you that, so far as I am concerned, I will simply do what I conceive to be my duty if I am called upon to prosecute either of these accused Senators. I will simply do my duty, but if you prevent me from doing it, then the responsibility rests upon

you and not upon me. [Applause.] The people of the State of California will look to you and not to me. That is all there is to it.

MR. CATOR: Mr. Chairman, I do not hesitate to say that no such scene as this has ever occurred under such circumstances. The gentleman is under no responsibility, and could not be for himself. The law has made this so. The sovereign people, through the Legislature acting in their wisdom and capacity, thirty years ago or more, whenever the period may be when they made the Political Code, made this law. It has remained upon the statute books until the present time, and in the interim they have added others of a like nature, like Section 64 of the Penal Code, which provides that in election cases, if any person testifies, he shall forever be free from prosecution as to any fact concerning which he testified; and other States have adopted the same rule. So that the gentleman is relieved from responsibility. The responsibility which he speaks of as to himself is a responsibility which the law has taken upon itself, and as the Supreme Court has frequently said, when the people talk about the law being bad, they declare that is bad which the people have declared is good. You are under responsibility yourselves as a committee, and the gentleman is under none. If the law has absolved persons who testify under certain circumstances, it is the law which has made the rule, and nobody is responsible for it; nor are you here to discuss whether it be good or bad, because it is decreed to be good in law by the people who made it. As to the suggestion that these parties, after the other witnesses have sworn, after all the testimony against them has been under oath, that a gentleman should come in here and say that they ought not to be put on oath, I will simply say I leave it to the committee.

THE CHAIRMAN: As the attorney for the four accused Senators do you object to their coming before this committee; do you object to them as your clients coming before this committee and making a voluntary statement?

MR. CATOR: I most certainly do. I have not been instructed by the Senators on that particular point, but I certainly will advise them that when all the evidence against them has been under oath, that they either make no statement at all or they make it under oath. If you desire me to consult with them, I will do so.

THE CHAIRMAN: I wish you would. You say you have not consulted with them. I think that he ought to consult with his clients. The committee desires you to consult with your clients, the four Senators, as to whether they desire to come before this committee and make a voluntary statement.

MR. ALEXANDER: As one of the attorneys for the accused I will put myself on record at this time as refusing to consent to any such a proceeding. They are charged here before the bar of this Senate with a terrible crime against their character. This committee has been hearing evidence which has been brought before it by prosecutors from San Francisco to work out, as it is evident to ^{many} of us, their own selfish ends. Now, the character these four men is put here on trial, and they have a right to defend themselves, and as an attorney for those Senators, I refuse to allow my consent to anything going on except in the regular order. I object—

MR. SIMPSON (interrupting): You mean that the Senators be sworn?

MR. ALEXANDER: That the Senators be sworn. I object to any other

proceeding for this reason: Even the worst criminal in any court is presumed to be innocent until he is found guilty. Now, if these Senators or any others are put on the stand in any other way, or if any suggestion from any outside source is allowed to sway this committee, it is a practical admission that this committee believes these Senators before they have had an impartial trial before them. If these Senators get upon this stand and swear falsely—and I tell you right now that every one of these Senators intends to take that stand and to swear they had nothing whatever to do with the accepting of any bribes—now, if that is not true, the statutes provide that they may be prosecuted for perjury. They have all the evidence to prove that charge of perjury, as they would in a charge for bribery. These Senators are not immune by testifying before this body. They can be prosecuted for perjury if they swear incorrectly or falsely, and the evidence will be just the same in one case as in the other, and I for one will refuse any consent to consult even with the Senators upon that point. [Applause.]

THE CHAIRMAN: If there is any further demonstration of hand-clapping in any way whatever, we will have this chamber cleared of everybody except those who are interested with the committee and the witnesses and the Senators. I want that understood: If there is any further demonstration, this room will be cleared and the galleries as well.

MR. SIMPSON: Mr. Chairman, this is a serious matter, and in view of the situation as it stands at present, I do now move you that this committee refuses to proceed further with the examination of any of the Senators, but that it report this matter as it stands now to the Senate to-morrow morning, and ask for instructions.

THE CHAIRMAN: Is there a second to the motion?

(Here the committee consulted privately together for a few minutes.)

THE CHAIRMAN: Do any of the Senators accused at this time—Senator Wright, Senator French, Senator Emmons, Senator Bunkers—desire to take the stand and make a voluntary statement without being put under oath.

MR. CATOR: No, sir; they do not.

MR. SIMPSON: I renew my motion.

MR. RALSTON: Second the motion.

THE CHAIRMAN: It has been moved and seconded that this matter be reported by the committee to the Senate for instructions. Are you ready for the question?

(Motion carried.)

MR. CATOR: I desire, on behalf of the accused, to not accept of this, but to request that the chairman of the committee report to the Senate that the accused object to any interruption of the trial and the orderly proceedings at this time, and we ask to have our objection in that matter presented to the Senate. That is all.

MR. JACOBS: I suppose, Mr. Chairman, we will adjourn until to-morrow night?

THE CHAIRMAN: Have you any other witness that you desire to put on?

MR. CATOR: No, we have not, unless Mr. Schlesinger is here. If Mr. Schlesinger is here I will accommodate him by calling him.

MR. ALEXANDER: He cannot reach here this early. It is too early.

MR. CATOR: In view of the extraordinary turn that this matter has now taken, I apprehend that these other matters are of no consequence at the present time.

THE CHAIRMAN: Has the other side any witnesses they desire to put on?

MR. McNAB: We may have, if the court please. We would just like to consult for a moment on that. [Consults.] May it please the Senators, we do not recognize that we are here in the capacity of prosecutors. We presented certain matters to the Senate in the form of an affidavit, and the Senators ordered that this hearing proceed and that we proceed with our offer to substantiate the matters that are contained in this affidavit. I am informed by the District Attorney that Mr. Jordan is willing to testify before this committee if the committee requests. We do not wish to appear in any sense that we are producing these witnesses, except the witnesses that were on the affidavit and the witnesses in support of the character of our witnesses who were attacked.

THE CHAIRMAN: Was not Mr. Jordan on the affidavit?

MR. McNAB: No.

THE CHAIRMAN: As agent?

MR. McNAB: Mr. Jordan since has been charged by the District Attorney with certain offenses and he was not any of the parties with whom we were interested in laying the foundation for this proceeding. We recognize him as the agent of the Senators, but I understand that he is willing to give testimony before this committee, and that the District Attorney does not object, and we certainly would not object if the committee will call him, with the understanding that we are not bound by his answers; and the testimony is there for either side to cross-examine.

THE CHAIRMAN: If there is no other witness here present, then we call Mr. Jordan.

MR. JONES: If the committee please, I appear here as the attorney for Mr. Jordan. Mr. Jordan has been regularly subpoenaed and is here under the compulsory order of this committee as a witness. He has been instructed by myself and Mr. Johnson as his counsel, knowing that he is under arrest upon three criminal charges here, that under Section 304 of the Political Code and Section 89 of the Penal Code, and the constitutional provision which provides for just such legislation, that he is compelled to testify. We have instructed him that there is no question but that the committee has a right to subpoena him, and that he is compelled to testify. He is here under those circumstances and submits himself to this committee and intends to tell the whole truth in this matter, regardless of any consequences that may befall him or anybody else hereafter.

MR. SEYMOUR: I presume, in view of the objection which I raised to swearing Senator Emmons, that some word of explanation is due from me to this committee, and I ask the privilege of now giving it.

THE CHAIRMAN: If there is no objection, the privilege will be granted. It is so ordered.

MR. SEYMOUR: I will state that as District Attorney of this county I had intended to object, and strenuously object, to Mr. Jordan being sworn and testifying as a witness in this matter, for the very same reasons which I have, just a moment ago, given to you in reference to swearing the accused Senators as witnesses; but to-day Mr. Jordan, honestly believe, spoke to me, talked to me frankly and fully in reference to his connection with this matter. As his attorney has said, he understands that if he takes the stand to-night, and falsifies in his testimony, a charge of perjury will stare him in the face. He also under-

stands that if he takes the stand and tells the whole truth in this matter, without equivocation or evasion of any kind, he will be absolved from further criminal prosecution. Now, I desire to say that if he keeps his pledge to me, and does take the stand and does tell the whole truth about this matter, every man and woman in California who believes in decency in public life, ought to take him by the hand and lift him up, and help him to live down the past and leave for his children the priceless heritage of a good name. Therefore, I do not object.

MR. ALEXANDER: One moment. We will have to object to any of these self-laudatory remarks on the part of the District Attorney.

THE CHAIRMAN: That is all right. Mr. Jordan.

TESTIMONY OF JOSEPH S. JORDAN.

Sworn.

THE CHAIRMAN: Now, on behalf of the committee, Mr. Simpson will proceed with the questioning.

MR. CATOR: Mr. Chairman, before you proceed, I desire to ask, has the order of the committee that this matter be reported to the Senate been rescinded.

THE CHAIRMAN: No; the matter of the Senators taking the stand will be reported to the Senate to-morrow morning, probably, when they convene.

MR. CATOR: It was that matter only?

THE CHAIRMAN: That matter only that was referred to then.

MR. SIMPSON: Q. Where do you reside? A. San Francisco.

Q. What is your business? A. A journalist.

Q. Your name is Joseph Jordan? A. Joseph S. Jordan.

Q. You are now stopping in Sacramento? A. Yes, sir.

Q. Whereabouts in Sacramento? A. 1116 Seventh street.

Q. How long have you been stopping at that address? A. Since the 2d of January.

Q. Do you know Clarence Grange, the Secretary of the Phoenix Building and Loan Association? A. Yes, sir.

Q. Do you know Senator Emmons? A. Yes, sir.

Q. Senator Bunkers? A. Yes, sir.

Q. Senator French? A. Yes, sir.

Q. Senator Wright? A. Yes, sir.

Q. You are aware that this committee is investigating a certain charge, wherein it is alleged that these Senators received money within the past two or three weeks, are you not? A. Yes, sir.

Q. Will you make a statement to this committee as to what you know of that charge, and any connection you may have had with it? A. Will I make a statement?

Q. Yes, sir. A. Yes, sir.

Q. Will you proceed to do so, beginning as far back as is necessary to connect the entire matter?

THE CHAIRMAN: From the beginning of the whole transaction.

A. I was then and am in the employ of Mr. Grange of the Phoenix Building and Loan Association, and have been on and off for about a year. I do their advertising; I have been doing their advertising in the weekly papers and in the daily papers—writing their ads for them,

and I came here on the 2d of January as the legislative correspondent of the "Post," and I had been going down to the city every Friday or Saturday, as the case may be. The second week I went down there I found a letter from Mr. Grange telling me not to go ahead with the advertising until he further directed me, and to cut it out in the future from the morning papers. We advertised in all three morning papers and the "Bulletin." There was a running advertisement in the "Post." I got that letter on Saturday evening, and on the following Sunday morning I rung up Mr. Grange, and explained why I had not answered it before; it had been lying in the office some days.

THE CHAIRMAN: Q. Do you know the date you got the letter? A. Saturday evening.

MR. SIMPSON: Q. Was it the 21st of January? A. No; I think it was the 14th of January. That was on a Saturday, was it? Then it was on the 15th that I rang him up from my house, and explained to him the reason I had not answered his letter was that I had been up in Sacramento. He wanted to know what I was doing in Sacramento, and I told him. He wanted to know if I was doing anything also up here, and I said "Yes," I was Secretary of the San Francisco Delegation. He said: "Is that so?" He said: "You may be of use to us up there. He says: "We are going to have some legislation up there, or rather, there may be some legislation in which we will be interested, and I would like to have you look out for it.

Q. Was this over the 'phone? A. Yes; from my house to his house on Sunday morning, and he said: "Now, to start with, I would like to have you get me a copy of every bill that is introduced in the Assembly and in the Senate bearing upon building and loan associations"; and he says: "When are you coming down here?" I said: "I will be down next Saturday." He says: "I wish you would come in to see me." He says: "It will probably be important to both of us, and there will be some good money in it for you in addition to your other duties for us." So I promised to do that. When I came up here I went into the State Printing Office, and asked Mr. Shannon if he would get me together copies of all the bills that had been introduced in both the Assembly and Senate up to date, and keep copies of each bill thereafter; I asked him to give me two copies of each bill, which he proceeded to do, and on the following week I went down Friday afternoon instead of Saturday. I got away from here so suddenly that I did not take the bills with me. On Saturday I went in to see Mr. Grange. I went in there to the office three times.

Q. Do you remember what date that was? A. That must have been on the 21st.

Q. You went to his office? A. If that was Saturday, that was the 21st; yes, sir. I called there three times and he was not in.

THE CHAIRMAN: Q. January 21st? A. January 21st. He was not in. So, in the afternoon I went back to the "Post," about 5 o'clock or a little after 5, and they told me that Mr. Grange had rung me up, and I rang up my home, and my wife came to the telephone, and she also told me that Mr. Grange had rung me up, and said it was very important that he should see me that evening, and she told him, so she told me, that he could not see me that evening as we had an engagement to go to the theatre, and she expected me home at 6 o'clock, and the rest of my evening would be taken up. Mr. Grange said that it was exceed-

ingly important, and that I should ring him up at the house. As soon as I hung up the telephone the operator upstairs in the business office told me that Mr. Grange who had rung me up two or three times was again on the 'phone, and wanted to talk to me. I took up the telephone and called up Mr. Grange, and said I was very sorry I could not see him, and he wanted me to come out, and I said I had an important engagement and could not come, as it was too near to 6 o'clock. He said he would like to see me. He says: "Did you bring those bills down," and I said: "No; I did not bring them down as I was in too much of a hurry, but I will send them down as soon as I return to Sacramento." He says: "How are things looking?" I said that I had not had an opportunity of looking into the building and loan association bills while I had been up there for the reason I had been so busy with my other work, but I said as soon as I got back I would send down the bills. He says: "How are things looking generally for us?" I says: "Of course you have heard of that Committee on Commissions and Retrenchment." He said: "Yes; that is what I would like to see you about; do you think they are going to do anything to us?" I says: "I understand they are going to examine all the building and loan associations." He says: "I wish you could come out here; it is a matter of great importance to me." I said I would ring up the house again, and see if I could make a stop there on my way home. I rang up the house, and much to my wife's displeasure I finally decided to go out to the house, and I went out to Mr. Grange's residence, and he came to the door himself, showed me in, and sat me down in the reception hall. Then he asked me what I thought of this. Well, I said I could not tell. I said I did not know what might be done. I said of course there was going to be a great deal of time taken up in the investigation of the Continental Building and Loan Association, and "I think that all the building and loan associations, yourself included, will be investigated." Well, he said: "Do you know these people who are the committee?" I said "Yes." I gave him the names of the committee. He says: "What do you think of the committee? What do you think of the status? Are there any business men among the committee?" Well, I says: "What do you mean?" He said: "Do you think that this committee will do business? Can we approach them?" I said: "I am sure I don't know; I do not know them well enough for that." Well, he said—he called over the various names, and asked me how they stood. "Now," he says, "Senator Bauer is with us; he is interested in building and loan associations; he will be all right; now, what do you think of the others?" I said: "Well, I am sure I don't know." "Do you know any of them well enough to talk to them?" Well, I says: "I know them all well enough to talk to them; of course it depends on the subject." He says: "Is there a combination there? Can't you go to them, and ask them if they want anything, and what they want?" I told him I did not know whether I could or not. He says: "You can go and sound them." He says: "If there are any there who would do business, whom do you think they might be?" I says: "If there are any who would possibly do business, they are Bunkers, Wright, French, and Emmons." He says: "Can't you see them to-morrow for me?" I says: "They are not here." He says: "Who of the committee are down?" I said that Bunkers was down, and I thought possibly French. He said: "Could

you see those people to-morrow, and after talking to them get a proposition from them?" I said: "I really do not know." "Well," he says "at any rate," he said, "You go and try, and see what you can do." He said: "As far as our business is concerned personally, we do not fear any investigation, but we just as leave not go up there, and we just as leave not be subpoenaed." He says: "There are four of us in a clique that work together on business propositions and propositions of interest to the building and loan association business," and he told me that those were the Phoenix, the Renters' and Loan Association, the Pacific States Investment Company, and the Continental Building and Loan Association. Well, I left him that evening, agreeing to go and see Senator Bunkers.

MR. SIMPSON: Q. At that time, at that conversation, was any amount of money mentioned that you remember? A. Yes, sir. He asked me if—what I thought it ought to be worth. "Well," I said, "I suppose for the Phoenix, possibly, if they would accept anything, I do not suppose they would ask more than \$250 apiece." He says: "Well, you go to them and see what they will do; see if they will make a proposition for four of them, or even what they will do for three of them." I said I did not think that they would attempt to do anything under any circumstances in behalf of the Continental, as I thought that they would be afraid to touch that, as there was so much talk about it, and so much in the air. He says: "At any rate, you go and see them and see what they will do." So I left that night, and I went to the theater. We had tickets for the theater, and the Tivoli was closed that night on account of the sickness of the prima donna, and I went to the Columbia, and I felt rather sleepy, and went out to get some fresh air, and got on the car and went up to Bunkers' place, on Market street; and I had a talk with Bunkers, and asked him after a little talk if there could be any business done on the proposition. Well, he would see about it, and see French on the next day; he had an engagement with him; would see him and see what he would say, and just what could be done. The next day about noon I went down to see him again, and he had not seen French. Then I asked him if \$250 apiece would be about right. He said that there would be four men—maybe five—that would have to be taken care of. So I went back to Mr. Grange and reported to him. "Well, now," he says, "Jordan, that is unsatisfactory." He says: "I would like to get something definite on that proposition." I told him that Mr. Bunkers had told me he would see Senator French during the day, but he had not been around yet, and he would be around later, before he went to Sacramento. So I told Mr. Grange that I would go back there and see the Senator, and that I would report to him by telephone whether that went or name the figure. He said: "If you could I would like to have you come back again." I said I did not think I would have time to come back again, because I was going to dinner, and was going to Sacramento that night. He said—I do not remember whether it was on that occasion or the night before, that he asked me what I thought I should be entitled to. I said of course I was doing the business there for him, and that I thought he would be the better judge of that; I would leave it to him. "Well," he said, "about \$250"; and I said I thought that would be all right. Well, I went back to Senator Bunkers, and I saw him that afternoon and I had another talk with him. He said that Senator French had been in,

and that they had agreed it was \$500 for the three of them—that is, \$500 apiece—to take care of the three companies, and the Continental would have to be a proposition by itself.

THE CHAIRMAN: Q. What was the total amount, \$500 apiece? A. \$500 apiece for the four men. He said there would be four men in the proposition. He said that the Continental, perhaps, would be an entirely different matter. He said that would come pretty high. I said, "How high?" "Well," he said, "we could not touch anything less than \$10,000 on that proposition; that would be \$2500 apiece." Well, I telephoned to Mr. Grange after I heard that, and I said: "Well, I guess I will have to come up and see you." He said: "Very well, I wish you would." I went up to see him, and told him the proposition. He says: "I will tell you; I will try and fix that." He says: "I will see the Renters' and Loan Association and the Pacific States, and I can speak for my own association, of course, and the Continental Building and Loan Association will have to take care of itself." He said: "They have others looking after that sort of business, and let them swing for themselves." "Now," he said, "what will you expect on the proposition?" "Well," I said, "you named the amount—\$250." He said: "All right; that was perfectly satisfactory." "Now," he says, "I will be up to-morrow afternoon, and I think I will be there with the money." He says: "I will talk it over, and I think that will be satisfactory;" and he says: "If I have occasion to telegraph to you I will use the name of Newell—Bill Newell." When I came up to Sacramento the next afternoon I received a telegram from Mr. Grange telling me to get on the long-distance telephone at 5 o'clock, and I telephoned to him, and he said: "Personally I cannot attend to that matter, but there will be another man up there to-morrow, and you can talk to him the same as if you were talking to me." He said: "It is all right, but there is a little change in the negotiations; it will probably be a little less." I said: "All right," and he said: "He will go to your room at 1116 Seventh street. He said: "I have given him the address; he will be right there, and everything will be all right; you need not be afraid to talk to him." He said: "He will be there between 1 and 2 o'clock; will come up on the noon train the next afternoon." The next afternoon about a quarter past 1 I telephoned over to the house, and the young lady who was there answered the telephone, and I told her that I expected a visitor, and to tell him if he came there that I would be there at a quarter to 2, and to show him in my room, and tell him to wait until I came. She said that he had been there already, but had stepped out for lunch, and would return. When I went over at a quarter of 2 he was in my room, and he said: "Well, I am Bill Newell." I says: "I understand." I said: "You come from Mr. Grange," and he said: "Yes, sir."

MR. SIMPSON: Do you know who the man is? A. That is Mr. Tichenor. I didn't know him then. He said: "Now, there has been a slight change in that; we went to the Pacific States, and they would not stand in; they seemed to think that they do not need any of this sort of protection, and as a result the amount has been reduced to \$350 each, and," he says, "Your amount will be \$150." I told him that must be a mistake; Mr. Grange certainly could not have sent that amount, because we had agreed on \$250." He said: "Well, that is all they gave me." I says: "That is not at all satisfactory." He said: "Well,

in that event we will have to send for the other hundred, and we will get it here; I will have it here to-night; I will telegraph or telephone, and it will be here about 7 o'clock." "Now," he says, "of course it will be necessary for me to see these men." I says: "I do not think that these men will see you." He says: "My orders are that I shall see each of them, and pay them the money." I says: "I do not think you can see them; I do not think they will do business with a stranger." He says: "I will tell you what you do: You see them anyhow, and see what they have to say." I said: "Very well; I will go up to the Capitol; do you mean to remain here until I come back?" and he says, "No; I will return here in about half an hour." I says: "I will be back in that time, and if I am not here, wait for me;" and I says: "There is no necessity for ringing the door bell." I says: "The young lady who is here may be out, or she may be down stairs busy; there is no use of disturbing her; I have got two pass keys, and you can take one of mine, and let yourself in the door." And he said: "Very well," and we left the place together.

MR. SIMPSON: Q. You gave him the key? A. I gave him the pass key. He went towards H street, and I went towards L street. I came up to the Senate, and I saw Senator Bunkers, and I told him that the party had come who had the money, and that there were only two to be considered in the proposition, and that therefore they reduced the price to \$350." He said: "That is all right, I guess."

THE CHAIRMAN: Q. You mean two companies? A. Two companies. I said: "He wants to see each of you personally, and pay the money over himself," and Senator Bunkers says: "Well, I won't agree to that, and I don't think any of the Senators will." He said: "That is not the proper thing to do; we won't take any chances of that sort." I says: "Well, I told him so, and that I would come up here and see you about it, and then return and let him know."

MR. SIMPSON: Q. Did you see any of the other three or four Senators at that time? A. The House was in session at the time, and they were all busy; so I returned to the room, and Mr. Tichenor was there waiting for me, and I told him that the plan was impracticable; that I had only seen Senator Bunkers, but that I believed he voiced the sentiment of the other three; that I thought if he wanted to do any business he would have to do it through me. He said: "I will tell you what to do: See if you cannot get the four of them to meet me; see if we cannot have a talk; let me have a talk and get some assurance that they will do the right thing—will do right on the proposition; that is all I want," he says. I says: "I do not think there is any use of trying that, but I will try it." So he came out again and went up to K street and I went down to Eighth street to the Capitol. I came up here and this time I saw Senator Emmons. Emmons says: "What is this proposition?" So I explained it to him, that this man wanted to do business with the Senators, singly or collectively, and that I had told him that it would be impracticable, and that I had talked to Senator Bunkers about the matter, and he said the same thing. He said: "Oh, yes; if he can not trust you, that is an end to the matter; we won't see him, and I am quite sure the others would not," and with that message I returned. I was to meet him at the Western Hotel; I was to have the four Senators there; I was to meet him at 5 o'clock, but I went down alone. There were not any of the Senators with me, and would not go with me. When I met him at the

Western, I told him the result of the conversation, and we started to walk up the street. He remarked to me before that he did not care about being seen, and he had therefore gone down to the Western Hotel to keep under cover, and I asked him if anybody here knew him. "Well," he said, "Al Murphy of the 'Examiner' would know me." So, we walked out of the Western Hotel, and I told him that the thing was impracticable and thoroughly off. "Well," he says, "I will tell you now—I know Senator Emmons, and he knows me. Can't you arrange for a meeting with Senator Emmons, and I will be satisfied if I can hand it to Senator Emmons and let him distribute the rest of the money to the other senators?" "Well," I says, "I know Senator Emmons and he knows you; I will try and get the Senator to see you." "Well," he said, "can't you be some place where he could see me, and I could see him." He said: "Of course I would know him right away if he was the same Senator Emmons who was here two years ago." I said he was. He said: "Make an appointment for 6 o'clock." He said: "How about the Golden Eagle?" I said: "That would be rather ill-advised; that is the time that all the Senators and everybody else is around there, and you would be very likely to run into Al. Murphy. If you do not wish to be seen by him it would be rather an unsafe place; but you can make it a block above—at Hanlon's, if you like—and I will have him there if I can find him." He says: "That will be agreeable, and in the meantime I will have your money up here; I will go and telephone to Mr. Grange." I says: "All right," and I walked up to the State House and saw Senator Emmons there. I asked for the Senator and asked him to come out, and he came out, and we walked down the street together, and I told him what the proposition was. He says: "Maybe I know him; if he is all right, I guess that will be all right; at any rate, I will go down there and see him." We walked down K Street, and got into Hanlon's a little before 6, and we waited there quite a while, and he did not put in an appearance, and I walked out of the door into the street, and he was in the front of the saloon. I do not know whether he had been in the saloon and gone out, or if he had just dropped in. He says: "I do not care to see Emmons. We have changed our plans on that proposition; I have had a long talk over the 'phone with Mr. Grange," and we went down to the store that was to rent, below Hanlon's, and got into the doorway, and he says: "Mr. Grange says it will be all right if you will pay this money and let me see you pay it." I says: "You do not suppose I would do that for one moment, do you?" He said: "That is all right; that is Mr. Grange's plan, and that is all right." I said: "I know Mr. Grange, but I do not know you." I said: "You do not suppose I would be idiot enough to let you or anybody else see me pay money to the Senators? That would not be reasonable." He says: "It is the proposition that we may have the whip hand on these men in case they fall down and attempt any legislation which will be hostile to our company or any other company. That is all I want." I said I would not do that, and he cajoled me and coaxed me, and it occurred to me that I might pay that money, and let him think he saw me pay it, and not let him see me pay it. So, after some talk and hesitation I consented, and we went over to my room again, and went in there and lighted the lights, pulled down the shades, and he took the money out of his pocket—he had it in fifty-dollar bills. "Now," he says, "how will we best fix this up so we can deliver it?" I

says: "The best way to make it will be to make it \$350 in each package." He says: "That is all right," and he put them down—counted out four \$350 packages—at least I thought they were \$350 packages—seemed to me they were; I thought they were.

MR. SIMPSON: Q. Were there any envelopes about them? A. No, sir. I do not know whether he took them out of envelopes or not, but there were not any around the packages.

Q. Did you see any envelopes he had there? A. No, sir; he simply laid the money down in four packages on my little writing table—counted out one, and another one, and another one, and another one.

Q. \$350 in each package? A. \$350 as I observed him do it. He said: "In what shape had we better put this up?" I said: "Just roll them up in little rolls, and I will put them in my pocket, and deliver them as I see the Senators;" and he said: "All right." So he gave me the rolls. I rolled them up. I put two in this right-hand trousers pocket, I put one in my left-hand trousers pocket, and I put one in my lower right-hand vest pocket, and then we went out into the street. He says in the meantime: "I have not got that hundred for you, but I will have it at 7 o'clock, and I will give you all of this." We walked up K street to Hanlon's, where I went inside and met Senator Emmons. I had agreed with him that I would give him a sign; that I would shake hands with each of these men, and he would know that the thing was done. He seemed only to want to be satisfied that I had actually seen these men and be guaranteed that the money was delivered. I came out with Senator Emmons, and I saw him cross the street, and I walked across the street diagonally across K and Eighth until we got on the other side, and I called Senator Emmons' attention to Martin Kelly standing there.

Martin Kelly was standing there talking to somebody, I forget who—I don't know as I know the party, and as we got on the other side I met Senator Welch, and we stopped there and said "How do you do," and Senator Welch said he was going to dinner, and I told him I thought it was a little early for dinner, but we would walk down there; and I asked Senator Emmons if he had ever been down to the place where we ate, and he said "No," he would like to go there. We walked down Eighth street, and went into the place, and was in there about two or three minutes, and we walked out, and Senator Welch asked us if we would go to Hanlon's and have an appetizer, and I said no, I had a little business with the Senator, I was going up the street with him, and we walked to K street.

MR. SIMPSON: Q. At that time did you know or see Tichenor—know that Tichenor was in the neighborhood or see him in the neighborhood anywhere. A. Yes, sir. When I came out of the club I walked—when we three walked up together, Senator Emmons, Senator Welch and I come up, he was standing on the street.

Q. To or from the club? A. From. He was standing on the corner of K and Eighth. I saw him and he saw me, and Senator Emmons and I walked along K street.

Q. South side or north? A. I do not know which are the directions—this side.

Q. Hanlon's is on the north side. A. Then it was the south side. We walked up the south side until we reached Ninth street. Now, I said, "Senator, I am going to shake hands with you and bid you good

by." Oh, on the way up we met Senator Bunkers. Senator Bunkers had invited me to be one of a party which was going out automobile riding, and I hailed him, and told him I would see him when I came back, which would be in a few minutes, and he said "All right," and on Ninth street, in the middle of the street above K, I shook hands with Senator Emmons.

Q. The middle of what street?

A. Ninth street—K and Ninth.

Q. On the crossing?

A. On the crossing; yes, sir.

Q. Did you stop on the way from Eighth to Ninth? A. Stop on the way? no.

Q. Walked directly up? A. Yes, sir.

Q. Were you conversing with Senator Emmons on the way from Eighth to Ninth? A. Yes, sir.

Q. What about? Do you remember? After you left the club? A. No; I don't remember. I suppose on different topics. I think I remarked to him when I got up a little way that I would hand him a little package; and might have been something else, but it was of a desultory nature. When we got in the middle of the crossing I had my hand in my trousers pocket, and I pulled out one of these rolls and shook hands with him and placed it in his hand. We were standing very closely together—going up the street—and I reached over that way and dropped it in his hand; he got it, closed his hand, put his hand in his pocket and went on his way. Then I came back——

Q. Speak a little louder. A. Then I came back from the middle of the crossing to the curb, and I went down a few feet and then crossed over to Senator Bunkers. On the way I met Mr. Tichenor, and I asked him if he saw me do it. He said: "Yes, that is all right." "Well, now," I says, "You will see me give it to Bunkers." He says: "All right." He walked down with me perhaps ten or fifteen feet and then crossed the street, to the south side of K. I was then on Hanlon's side, and I met Senator Bunkers down a little below the Clunie Opera House, and I asked him if he was going out automobile riding; he said "yes." "Well," I says, "I can't go to-night; step around the corner; I want to see you." And we stepped around the corner there together and we had a little talk there and I said "I will pass you a package in a moment—\$350.00 in it." I says: "I will shake hands with you." He says: "No; don't shake hands with me;" he says, "drop it in my overcoat pocket." And I got very close up to him and I dropped it in his overcoat pocket. He was then rolling a cigarette. And I started away from him and I stopped and reached back and shook hands with him, and we were then behind, I think it was, a popcorn cart which is usually down there on K and Eighth streets; and if I am not mistaken there was a wagon next to the popcorn up there on the street. I shook hands with him, and as I emerged on the other side of the popcorn cart Tichenor was across diagonally opposite from me. He was near that saloon right straight across from Hanlon's on the south side of K street, and he held up his umbrella to indicate that he had seen it. So I walked across the street and joined him at Hanlon's, and I says: "We will go down and see Wright and French, and we may find them at the Golden Eagle. So we went down to the Golden Eagle, and I ran through the barroom and they were not there; so I came out and told

him that they had left there, and the most likely place to meet them would be up at the committee meeting at 817 Tenth street; they would be there about 8 o'clock, or a little before 8. "Well," he said, "I will be there." I said: "All right; I will be there."

Q. Up to this time had you talked with Senators Wright or French about this matter? A. You mean on this day?

Q. No; not on this particular day, but any time up to this time that you have got to now? A. Yes, I talked with Senator French.

Q. In San Francisco? A. No.

Q. In Sacramento? A. Yes.

Q. Go back to any conversation that you may have had with French, now. A. He asked me—I saw him here on Monday that we came up, and he said: "What are these three companies they are talking about? What is the Pacific Company?" I said: "That is the Pacific States." And he said: "It is not the Pacific Coast or the Pacific"—something else. He showed me a book with the Pacific—I says: "Oh, no; that is not it at all." I says: "It is the Pacific States." "Well," he says, "that is all right; I will stand for that, but I will not stand for the other." He says: "That is a pretty bad institution." That is all the conversation I had with him at that time. And to continue, I went to dinner, and I was at the appointed place at 8 o'clock. I met Tichenor there. He said: "You are a little late;" he says, "they have all gone in." "Well," I says, "I will go in and see if I can get them out." So I went into the committee rooms, and there was a colored boy there who met me at the door, and he said: "I will"—I asked for Senator French. "Well," he said, "the committee has gone into executive session; I don't think you can see him." He said: "however, I will tell him that you are here and see what he says." So he was at the top of the stairs and I was down below, and he disappeared and came back in a minute or so and he says: "Senator French does not want to see any newspapermen at all; he says he is too busy." I says: "Did you tell him who it was?" "Well," he says, "I didn't mention the name, because I didn't know it." "Well," I says, "you tell him that it is Jordan." And he went back and returned in about a minute and he says: "I can't get in at all," he says; "they are so busy in there, they won't let me in." "Well," I says, "all right." So I went down the stairs and I told Mr. Tichenor the result of my interview with the colored boy, and I said: "Now, the best thing to do is to come back here about a quarter past 10—a quarter past 10 or half past 10. I says: "They will adjourn and will probably go down to K street and down to the Golden Eagle." "So he agreed to be there at a quarter past 10, and at a quarter past 10 I was there. I walked up on that side of the street—that is the side opposite; I walked up on the plaza side of Tenth street, and as I was going up I saw the entire committee and quite a crowd there with them going down; and not seeing Tichenor about I didn't bother with them at all. And I walked down as far as—I got down Tenth street and I didn't find him, and I didn't know what to make of it. I thought probably he had been delayed; but at any rate I waited there for perhaps half an hour, walking up and down the street, and I concluded that something had gone wrong. I didn't know just exactly what had happened to him, and I thought I would go down to the Western Hotel, where he was staying. So I started down

and got down to the Golden Eagle—a little below the Golden Eagle—and there I met him. “Well,” I says, “you are a nice fellow,” I says; “why didn’t you keep your engagement?” “Well,” he says, “I was here.” I says: “Why, I didn’t make an engagement for here; I made it for 817 Tenth street.” He says: “I didn’t so understand it.” I says: “That was it.” I says: “I walked up there and,” I says, “the committee is coming down.” He says: “You paid them, did you?” I says: “Why, certainly.” “Well,” he says, “then all right.” He says: “I am sorry I didn’t see that; but,” he says, “that is all right. Now,” he says, “you step down the street and I will—that hundred hasn’t come yet, but,” he says, “I will give you the hundred and fifty, and I will have the hundred for you before midnight.” I says: “Very well.” I took the hundred and fifty. He said: “Shall we go some place?” I says: “I don’t think it is necessary to go any place,” I says; “you can give it to me right here on the street.” So he gave me three fifty-dollar bills. And he said he would meet me at the Golden Eagle at 12 o’clock and he would have the hundred for me, and he says: “I will run down to the depot and see if it is there.” So he left me there and I walked over to the Capital, and I walked back to the Golden Eagle and I saw Senator French there; he was talking to a number of people; Mr. Hamilton of the “Examiner” was in the crowd; I think Mr. Murphy, and there was quite a number there gathered, and I joined the group and I asked them what they had done at the meeting. “Well,” he said, “we had an executive session and what we did is not for publication.” I says: “I would like to see you a moment about that”—and I stepped over to the curb, and I said: “Let’s take a walk around the corner,” I says; “have you ever been down to the Irish Tavern?” He says: “No, is there an Irish tavern in town?” I says: “Yes; let us go down there and get a drink.” He says: “If there is an Irish tavern in town I would like to go and see it.” So we walked down Seventh street to I and up to J, where we were overhauled by Senator Carter, and we stood there talking with Senator Carter for a little while, and I asked the Senator if he would join us and go up to the Irish Tavern and have a little drink. He said: “No,” he was going to his room, he had some work to do and hadn’t time—something of that sort—and wished to be excused. So then we walked on down, and on the way down there, about a quarter of a block from the corner of J, I said: “I am going to hand you something,” and he says: “All right.” So, with my left hand I took one of the rolls out of my trousers pocket and handed it to him over this way and he took it, and we went down to the Irish Tavern and we had a drink.

THE CHAIRMAN: Q. Roll of bills—it was money? A. I gave him the roll of bills, yes. I passed them over this way, and he took them and put them in his pocket. And we walked down to the Irish Tavern and had one drink—just one drink—and he said: “Let us go; I am going home.” So we walked out and walked up to K street, where he left me. He said he lived up J street, and he was going that way. So then I went up the street looking for Wright; and I went to the Capital and I looked in at the Golden Eagle, and Wright didn’t show up. And while I was in the Golden Eagle door Tichenor came along and he passed through to the lavatory, and on his return, passing out again, he signaled to me and I went out on the street with him. He said: “Well, I got that hundred for you.” “Well,” I says, “that is pretty good.” He

says: "Let's go some place and I will give it to you." So we walked down K street to Sixth; we went around the corner of Sixth street and he gave me \$100. "Now," he says, "let's go and have a drink." I says: "Very well." We walked up K street again, and I says: "Let us step into the Golden Eagle." He says: "No; too many there; let's go to the Capital." So we went over to the Capital, and he says: "Let us go in one of these rooms here and have a small bottle of wine." I says: "Very well." We had a bottle of wine. He said: "Well, now, I have got to get down to—I have got to get down and get on to that sleeper—get my sleeper down on the overland." I asked him to have another bottle of wine. He said: "No, thank you." He was very much pleased so far as he had gone, he said. He went away—we shook hands very cordially. I says: "Of course your name is not Newell," I says; "what is your name?" He says: "It is Merrill," and he left. Next morning about noon I saw—

MR. SIMPSON: Q. What day was this? What day of the week?
A. Tuesday.

Q. You have been talking about Tuesday? A. About Tuesday; yes, sir.

Q. The next day—you mean Wednesday? A. The next day was Wednesday. And I was in front of the Capital Hotel and Senator French came up to me and says: "Have you seen Wright?" I says: "No, I have not." "Well," he says, "he is looking for you." "Well," I says, "I have been looking for him, but I have not seen him; but I will see him, however." And then Senator Bunkers called me over and he said: "I was fifty short in my package; how about that?" I says: "I am sure I don't know. I saw the money counted out there, and I could have sworn there were four \$350 packages; I don't know how you could have become short." "Well," he says, "now you know what is right is right." He says: "If there was \$350 there is no reason why I shouldn't get it." "Well," I says, "of course you will get it; it must have been paid to one of the others; the money is not short. However," I says, "I have got these in my pocket and I will count them and see if there is \$350 or \$400 in one." So I did. I went up to my room and I counted the roll, three hundred and fifty—there were seven fifty-dollar bills in the pile. So I went up to luncheon and I met former Senator Tyrrell, and he and I walked up K street together, on the south side, opposite Hanlon's, and on Ninth street, Ninth and K, we met Senator Wright.

Q. Whom were you with at this time? A. Former Senator Tyrrell.

Q. John R. Tyrrell of Nevada City? A. John R. Tyrrell of Nevada City; yes. "Now," he says, "I don't believe I will go any further; I will see you later at the Capital—I want to stop at the Capital and talk to Senator Wright." I says, "I have a word with Senator Wright, too." And the Senator stepped back, and I says: "Do you know where the Irish Tavern is?" He says: "No." I told him it was on the corner of Seventh and I. I says: "You be there at 2 o'clock and," I says, "I will be down there and I will give you that money." He says: "All right." So I walked up K to Tenth street and walked over Tenth to I and down I to Seventh, and I waited there for perhaps five minutes talking to Denny Walsh, the proprietor of the place. He wanted to know what I was doing down in that part of the country. I told him that I expected

to meet a party down there. So about five minutes, probably—between five and ten minutes after I was there, Senator Wright came along.

Q. Where were you—inside? A. Outside.

Q. On the corner? A. Yes. And Senator Wright came along on the opposite side—on the side on which the “Bee” office is—and I went across the street to join him, and he said: “I don’t see where this Irish Tavern is.” “Right across the street,” I says. I said: “Do you see that side door?” He says: “Yes.” “Well,” I said, “you go over there and you go in the door first and you turn to the left and there is a lavatory to the left, and,” I says, “you go in there and I will follow you in and I will give you a roll of bills.” He says: “All right.” He went through the door first and went to the left and I followed him and passed him over the bills and he put them in his pocket and I went out to the bar and bought a drink—

Q. Who bought the drink there? A. I did—treated. We walked up I street to Tenth, and he was going to a meeting of the Committee on Retrenchments. I walked down with him to the committee rooms and told him to send Senator Emmons down; I wanted to talk to him. Senator Emmons came down and I told him about this shortage—this \$50 short, and Emmons said that it had to be fixed up and no doubt it would be fixed up and he would see to it. So I went up to the Capital.

Q. Prior to the time you paid this money to Senator Wright at the Irish Tavern, had you talked with him personally about this matter, or what it was about? A. I do not recollect having done so, Senator.

Q. Well, when you met him that day near the Irish Tavern, will you state in detail what the conversation was—more in detail, as you recollect it. A. I met him in front of the Irish Tavern.

Q. Yes. A. I walked over from the Irish Tavern to nearly where the “Bee” office is, and he says: “Where is this Irish Tavern?” he says, “I can’t find it.” I says: “Right across the street—right opposite here, on the other side of the street.” I says: “Don’t you see the name over the door—the side door there on Seventh street?” “Oh, yes,” he says; “I see it now.” “Well,” I says, “we will walk over there now and,” I says, “you precede me in the door and,” I says, “I will follow,” I says. “On the left is the lavatory,” I says; “we go to the lavatory as we go in and,” I says, “I will hand you the bunch of bills and we will come out and that will be all there will be to it.”

THE CHAIRMAN: Well, Mr. Jordan, had you any conversation with any of these Senators before you paid them the bills—that is, with reference to what they were to do after being paid, and how much they were to be paid? A. Yes, sir.

Q. These bills that you paid to these Senators were United States money? A. Yes, sir.

SENATOR RALSTON: United States currency? A. Currency; yes, sir. I didn’t examine the bills at all.

THE CHAIRMAN: It was United States money? A. Yes, sir. That is, to the best of my knowledge; they were greenbacks. Tichenor counted them out on a table, and I took them just as he counted them; I never examined them, except to count Wright’s roll.

MR. SIMPSON: You had that roll with you over night? A. Yes, sir.

Q. Were they in rolls when you passed them over? A. Yes, sir; all of them.

Q. Did you ever have a conversation with any of these four Senators,

Mr. Jordan, as to what service they would render or what their attitude was to be as regards any existing legislation for this money which was to be paid to them? A. They were not to subpoena the people of the Phoenix Building and Loan Association or the Renters' Loan Association.

Q. Now with what Senators did you have such conversation?

THE CHAIRMAN: And agreement? A. Senator Bunkers and I did most of the talking.

MR. SIMPSON: Read the question as I have asked it, Mr. Reporter.

(The Reporter read the question.)

A. Senator Bunkers and I did most of the talking.

Q. Did you have such a conversation with Senator French? A. Well, I had a conversation to this effect with Senator French: I saw him here in the Senate during the recess Monday. He asked me what these companies were that were in on this proposition—that are to be taken care of. I said the Phoenix, and the Renters' and Loan, and the Pacific States. And he took a book out of his desk and he said: "Is this the Pacific that you refer to?" and I said: "No, it is not." "Well," he says, "that is all right then." He says: "If it was this company," he said, "I am going for that company to beat them bad." He says: "I will stay right with them. I would not stand for it to have them come——"

Q. Did you meet Senator French in San Francisco at all prior to coming here? A. On this subject?

Q. Yes? A. No, sir.

THE CHAIRMAN: Q. What was your conversation with Senator Emmons, if you had any relative to this? A. Senator Emmons and I met that afternoon——

Q. What afternoon? A. Tuesday afternoon. After it was known that Tichenor was here, and I spoke to him, as I have related there about Tichenor giving this money to them either singly or collectively and he told me that they wouldn't stand for that at all; he said if they didn't have any confidence——

Q. Well, before that time did you have any conversation with Senator Emmons or agreement with him that you were to pay him money for immunity? A. No, sir.

MR. SIMPSON: Did you mention at any time to Senator Emmons the company that this money was to be paid for? A. I do not think I did. I do not think I mentioned any name except the Phoenix—that Mr. Tichenor was the representative of the Phoenix.

Q. To whom? to what Senator? A. I think I said that to Senator Emmons.

Q. Where did you pay Senator French? A. Senator French—I paid Senator French about a quarter of a block down from J street on Seventh.

Q. North or south on Seventh—that is, towards I or K? A. Toward I—between J and I.

THE CHAIRMAN: Well, did you have any conversation with Senator Wright? A. Not at all.

MR. SIMPSON: Q. When you met Senator Wright with ex-Senator Tyrrell, I understand you to say that you told him to go to the Irish Tavern at 2 o'clock? A. Yes, sir.

Q. Did you say to him at that time that you had some money for him? A. Yes, sir.

Q. That you would pay him some money there? A. Yes.

Q. What time was that that you spoke to him? A. That was about, I should judge, twenty minutes of two.

THE CHAIRMAN: Did you tell him what the money was for when you paid him the money? A. I never said a word to him. I said simply: "Here is your money."

MR. SIMPSON: When you spoke to Senator Bunkers here on the occasion of your visit from 1116 Seventh up here when the Senate was in session—on Tuesday was that? A. Yes, sir.

Q. Tuesday morning? A. Tuesday afternoon.

Q. Did you mention, or was there any conversation about the other three Senators—that is, Senators Wright, Emmons and French—with him? A. No; that was understood down in San Francisco, when I spoke to him on Sunday.

Q. To Bunkers? A. Yes.

Q. In San Francisco? A. Yes.

Q. The names of those Senators were mentioned? A. Yes, sir.

THE CHAIRMAN: Was Bunkers to make the arrangements with these other Senators for you? A. No; there was nothing at all said about that.

MR. SIMPSON: For the present those are all the questions the committee desires to ask. I presume there will be some cross-examination.

MR. NICOL: So far as the cross-examination we may have, we would very much prefer to have the transcript before we proceed with the cross-examination.

MR. ALEXANDER: We would, likewise.

MR. CATOR: We ask to have the testimony of this witness written out and given to us before the next meeting.

(The Chairman ordered the reporter to transcribe the testimony of this witness at the earliest possible moment.)

THE CHAIRMAN: The witnesses who have not been examined will present themselves here to-morrow at 8 o'clock P. M. and the committee is adjourned to that time.

NINTH SESSION.

SENATE CHAMBER, February 9, 1905, 8 P. M.

THE CHAIRMAN: The committee will come to order. Before we proceed with the examination, I desire to offer here, and have it put in the records of the committee, a certified copy of the resolution which was adopted by the Senate this afternoon concerning the question that was asked by this committee of the Senate.

MR. CATOR: Please read it.

THE CHAIRMAN: We just want to put it in our record.

MR. CATOR: Will you please read it? I have not heard it except from a distance.

THE CHAIRMAN (reading):

SENATOR BELSHAW: Chairman of Special Investigating Committee appointed under and by virtue of a resolution duly adopted by the Senate on January 30th, 1905.

I do hereby certify that the following is a true and correct copy of a resolution duly adopted by the Senate of the State of California on February 9th, 1905.

WHEREAS, The Special Committee of five appointed by the Senate of the State of California on the 30th day of January, A. D. 1905, to investigate the charges contained in the affidavit of William Corbin sworn by him the 27th day of January, 1905, before Harry J. Lask, Notary Public, etc., and read at the regular session of the Senate of the State of California on Monday, January 30th, 1905, has reported and presented to the Senate for its instructions, as follows:

MR. PRESIDENT: Your special committee of five appointed pursuant to a resolution adopted by the Senate on the 30th day of January, A. D. 1905, to investigate the charges contained in an affidavit reflecting upon the honor, integrity and conduct of certain members of the Senate contained in said affidavit, beg leave to report:

That at a session of said committee held in the Senate Chamber Wednesday evening, February 8th, 1905, one of said accused Senators, to wit: Senator E. J. Emmons, presented himself before the committee and requested to be sworn and examined as a witness; that thereupon, A. M. Seymour, Esq., District Attorney of the County of Sacramento, State of California, addressed the committee, and objected to the administration of the oath to said Senator E. J. Emmons, or to the taking of his testimony as a witness under oath, specifying the following reasons for his objection: That under the provisions of the law, that if said Senator Emmons or any of the other accused Senators were permitted to testify as a witness under oath before this committee, it would preclude any future criminal prosecution on the part of the people of the State of California against any Senator so testifying. The chairman of the committee, for the committee, asked the accused Senators if they were willing to make voluntary statements before this committee, without being sworn, and the said Senators by their counsel replied that they would not.

Whereupon, it was unanimously resolved by the committee that this matter be reported to the Senate in order that this committee might receive the instructions of the Senate upon this question.

Your said committee therefore presents the following interrogatory to the Senate, on which it requests definite instructions: Shall the committee refuse to swear any or either of said four accused Senators and decline to receive their testimony under oath?

BELSHAW, Chairman.

Be it resolved, That in order completely to vindicate justice, the said special committee is hereby directed and instructed not to administer an oath and examine any of the said Senators thereunder as to any fact or act in connection with any of the matters contained in the said affidavit of William Corbin above mentioned.

LEWIS A. HILBORN, Secretary of Senate.

THE CHAIRMAN: Adopted February 9, 1905.

MR. CATOR: I understand you file that as part of the records.

THE CHAIRMAN: Part of the records of the committee.

MR. CATOR: I will ask, if the committee adopts that resolution as its rule of action in the respects of which——

THE CHAIRMAN (interrupting): Of course.

MR. CATOR: Your committee adopts that as its rule of action?

THE CHAIRMAN: It does.

MR. CATOR: And the respective Senators, if presented at the bar with the request that they be sworn, they will not be sworn by this committee?

THE CHAIRMAN: They will not be sworn by the committee, the committee having been instructed so to do by the Senate.

MR. CATOR: I only want the matter in the minutes, of course. Is the stenographer taking this down?

THE CHAIRMAN: Yes, Mr. Cator. The stenographer is taking down what transpires.

MR. CATOR: I desire to have an exception noted on behalf of the four Senators to the ruling of the committee under that instruction of the Senate.

MR. NICOL: We understand, Mr. Chairman, that each Senator may

make a voluntary statement, with the understanding that such statement can be received as evidence and as though given under oath.

THE CHAIRMAN: They can make a voluntary statement if they desire?

MR. CATOR: I think we can manage our side of the case, Mr. Nicol, without any assistance. We have quite a number of counsel here.

THE CHAIRMAN: Do you desire to proceed further?

MR. CATOR: I suppose the first thing will be the cross-examination of Mr. Jordan.

THE CHAIRMAN: He is present. Do you desire to cross-examine him?

MR. CATOR: I do not desire to ask him anything whatever. His testimony is of such a character, and he is a witness of such a nature that I do not wish to ask him any further questions.

MR. NICOL: We desire to cross-examine him

TESTIMONY OF JOSEPH S. JORDAN.

Recalled.

Cross-Examination.

MR. CATOR: I object to his being cross-examined by the other side on the ground that he is in fact produced as a witness by the prosecution. Last evening——

THE CHAIRMAN: Do you object?

MR. CATOR: I do. Last evening after the committee had stated they would report to the Senate and ask for instructions on the question of swearing the Senators, the committee asked Mr. McNab if he had any other witnesses to offer, and he said: "I will see," and crossed over and spoke to Mr. Jordan, and then asked you to ask Mr. Jordan to appear upon the stand. I believe under those circumstances and after what has been decided by the Senate to-day, having called him out of order, when it appeared he was a witness for them from the commencement, his testimony, in contradiction of Mr. Grange, is that from the start he was a part of their outfit, and that he was requested by them to ascertain whether there were any Senators that could be tempted by money; and it was a part of their outfit, and from the beginning he is a part of the prosecution, and was in effect called as a witness by them, and it is not fair that they should be permitted to cross-examine their witness who, in substance, is their own witness, notwithstanding they procured a subpoena from the committee. Every witness was in a sense procured by the committee. Subpoenas were issued for every witness, but there has been but two sides to this case as it has been recognized from the beginning. They were called the prosecution and allowed to prove their case in their own way. They put their witnesses on the stand and closed. They intended then to call this witness. Everything shows it was then intended to call this witness, and when he was called here and put on the stand, he was a part of the prosecution, and I objected to the people being permitted to cross-examine their own witness. It is not fair that they should be permitted to, when every word he testifies to shows he has been their witness from the beginning.

MR. McNAB: I would like to correct the record that the statement of Mr. Cator attempts to make in the stenographic report. I did not speak to Mr. Jordan last evening and I did not call him as a witness. I was

informed by the District Attorney last evening for the first time, after coming into this Senate chamber, that Mr. Jordan was going to testify. I did not speak to Mr. Jordan, but to the District Attorney. I then stated to this committee that we would not call Mr. Jordan or be bound by his answers. The subpoena for Mr. Jordan, as I understood, was issued by this committee on its own motion, and by authority of a board of inquiry of the Senate, and this committee called Mr. Jordan last evening as its witness. I had no knowledge up to last evening that Mr. Jordan would testify before this committee.

MR. CATOR: Mr. Chairman, the evident unfairness of allowing cross-examination of this witness lies in the fact that the witness has stated what they desire in confirmation of this. Now, he has contradicted their main witnesses at vital points, and this pretended cross-examination is nothing but a subterfuge and an attempt, after having a day for it to get cold in and read the testimony, to patch up, by pretended cross-examination the places where he has already broken down their other witnesses.

MR. SIMPSON: Is it not a fact that this witness contradicted in important respects some of the testimony that was put in here by the prosecution?

MR. CATOR: Certainly. And now I say they should not be permitted to patch up by this witness, after they had a day to pass with him to get him to change his testimony in the respects that he has already ruined their witnesses.

MR. SIMPSON: Why should they not be permitted to cross-examine as well as you?

MR. CATOR: I do not wish to cross-examine. He has testified against the accused. His testimony is for them, and every word was against the accused, and any cross-examination, when a witness has given every word of his testimony in favor of the prosecution and every word against the accused; every sentence was against the accused, and every sentence he uttered was in favor of their case, and it was evidence for the prosecution, every word of it, and every word against the accused, and any cross-examination, when a witness has given every word of his testimony in favor of the prosecution and every word against the accused, to allow a witness of that kind, under the pretense that it is cross-examination, to patch up anything that they are now sorry that he said, is something that in my judgment this committee ought not to allow under the guise of cross-examination. If the committee desires to examine him further, do so. Mr. McNab says this committee has gotten into a position where the committee can examine him further if it desires; but to allow them, after they had had a chance to sleep on it for twenty-four hours—that under the guise of cross-examining a witness whose every word was in favor of the prosecution and against us, to patch that up, after twenty-four hours, the testimony which has ruined their case, I do not think it should be allowed.

MR. NICOL: Mr. Chairman, the counsel possesses, judging from his words, that superiority of knowledge I cannot aspire to. When he claims we have slept on this witness' testimony something like twenty-four hours and desire to patch up something, he has uncovered purposes we never dreamed of. We were not here of our volition. When in this chamber in the presence of each of you gentlemen and every one of your colleagues a week ago last Monday, I was given the privilege of

speaking to you on behalf of a defendant. We were not here voluntarily. You had sent your Sergeant-at-Arms armed with a summary process to compel a citizen of this State to appear at the bar of this Senate and answer for alleged misdeeds in the way of contumacy. He came here, and, speaking through his counsel, he laid before you such things in his defense as he saw fit and proper. In addition to that, he made the most serious charge that a man could make in a body of this character. Necessarily, I felt a deep interest in that matter, and I feel a deep interest now, for it could not be possible that any man who aspired to be treated among his fellow men as possessed of common decency could properly have preferred a charge of that character, even as an attorney, unless he felt he was handling a case where it was more difficult to doubt than it was to believe. Shortly after, I said to some of the members of this committee that everything I had in my power would be at the disposal of this committee, and that I hoped, ere this investigation was over, that there would be no doubt of the truth of the accusations made in that affidavit. On the same night that this most unfortunate affair was initiated, this committee was organized and we were called before you. You will remember on that night, not for our sake, but for the sake of those men who thought that in expedition there was hope, I asked for delay. The delay was granted. On the evening following, the investigation actually commenced. On that night I expressed a doubt that I would have anything to do with the investigation, and that we did not desire to occupy the position of prosecutors in this investigation. We had no desire and have no desire now, except to make the truth so conspicuously apparent that no reasonable man can doubt it. That is all we are here for. We seek no subterfuges, hunt no cover, but are willing to let the light of day shine just as keenly upon every act of ours as we have endeavored to bring to bear upon the acts of others. I do not desire to dispute the testimony of this gentleman who sits as a witness at the bar of this Senate chamber. I desire to overhear corroboration of his testimony from his own lips. I desire to follow him step by step in this tortuous route he has traveled with these men who are defendants here, to the end that though he is charged with being an accomplice, he may stand in the position the law requires him to, and have corroborating circumstances and evidence, which in itself, independent of the testimony of the accomplice, is sufficient to connect the accused with the commission of the offense. The first question I proposed to ask this man was, where were you living, and did you have a key? I proposed to call upon the chairman of this committee to produce the key, to the end this witness might testify that was the key which he gave to Detective Tichenor, and so I proposed to follow him to the very end, that there might be corroboration of the material matters in this case, connecting these accused with the commission of this offense. That is all I have to say.

MR. JACOBS: It was stated here last evening by the District Attorney of this county that sufficient evidence had been introduced at this investigation to authorize criminal prosecution of these Senators. If sufficient evidence has been produced in the mind of the District Attorney or in the minds of this committee to authorize this committee to find an adverse report against these defendants, and these defendants had no further testimony to offer before this committee, why is it neces-

sary to go into a further cross-examination of this witness to elicit any further facts, when it is agreed by the prosecutor of this county, and I dare say by the committee, that sufficient evidence has been adduced? We submit that the cross-examination of this witness would be a waste of time under these circumstances.

THE CHAIRMAN: I am not aware that this committee has had sufficient evidence.

MR JACOBS: I am referring to the prosecuting attorney of this county.

THE CHAIRMAN: The prosecuting attorney of this county has nothing whatever to do with this investigating committee. In view of the fact that this committee will have to review all of the testimony that is given here before it makes its reports to the Senate, the objection of Mr. Cator to the questioning of the witness Jordan by Mr. Nicol or Mr. McNab or the prosecution, if you desire to call it, for the prosecution, is overruled.

MR. CATOR. We reserve an exception to the ruling of the committee.

THE CHAIRMAN: Note the exception.

MR. NICOL: Q. Mr. Jordan, where did you reside in Sacramento?
A. 1116 Seventh street.

Q. Was there a young lady living in that house? A. Yes, sir.

Q. What was her name? A. I think it was Margaret Erhart.

Q. Did you ever at any time have any conversation with that young lady with reference to admitting to your room any person who might call on you? A. Yes, sir.

MR. CATOR: I object to that on the ground that he testified to the conversation with her fully last night. She has testified here herself.

MR. SIMPSON: I do not think he mentioned any names.

MR. CATOR: He stated what he said to the lady there.

MR. SIMPSON: I think the objection should be overruled.

A. I did not mention the name.

MR. NICOL: Will you read the question, Mr. Vaughn?

(Question read.)

THE CHAIRMAN: Do you object to that question?

MR. CATOR: I object to it because he testified to that matter fully and he went into it in detail.

THE CHAIRMAN: The objection is overruled by the committee. Will you repeat the question, Mr. Reporter?

(Last question and answer read.)

MR. NICOL: Q. When did you have that conversation? A. It was about a quarter past one over the telephone.

Q. On what day? A. On Tuesday; I do not know what that date would be—Tuesday.

Q. With reference to the time of the payments of which you testified, when was that? A. Tuesday night and Wednesday afternoon.

Q. Of the same week? A. Of the same week—the same Tuesday afternoon—Tuesday night of the same day on which I telephoned.

Q. Did you tell her whom you expected? A. No, sir.

Q. What did you say to her? A. I telephoned and told her that there would be a gentleman over there to see me between one and two o'clock that afternoon and she told me that he had been there already, and that he had gone to luncheon. I told her that in the event of his return, to tell him that I would be there about a quarter of two.

Q. Whom did you expect? A. I expected an agent of Mr. Grange—representative.

Q. Did you expect him that day? A. Yes, sir.

Q. Was he of whom you are speaking? A. Yes, sir.

Q. When you spoke to this young lady? A. Yes, sir.

Q. It has been testified in the course of these proceedings by Mr. Tichenor that you gave to him a pass key whereby he could obtain admission to the house in which your room was situated; is that the truth? A. Yes, sir.

Q. When did you give him that key? A. I gave it to him when we left the house together.

Q. I call to your attention a key which is produced from the chairman of this committee. I ask you to examine it and tell me if that is the key you gave to Mr. Tichenor for the purposes you have testified? A. I think it was.

Q. What was your purpose in giving him the key? A. That he might enter the house without disturbing anybody who might be there, or in case there was nobody at home when he returned to meet me again.

Q. Did you find Mr. Tichenor, whom you then knew by the name of Newell, in your room in the house wherein you were living awaiting your return on this Tuesday to which you refer? A. Yes, sir.

Q. At what time of day was that? A. About a quarter of two.

Q. Mr. Jordan, when did you become acquainted with Senator E. J. Emmons? A. I think it was in 1897.

Q. Have you known him since? A. Yes, sir.

Q. How soon after the convening of this Legislature did you renew your acquaintanceship with him? A. Why, the first day I met him.

Q. How long have you known Senator Bunkers? A. Since the last session.

Q. How soon after the convening of this session of the legislature did you renew your acquaintanceship with him? A. I have met him in the city several times between the sessions.

Q. Did you have any conversation with him at that time concerning legislative prospects? A. In the city?

Q. Yes, sir. A. No, sir.

MR. ALEXANDER: We will object—all right.

MR. NICOL: Q. How soon after the convening of the Legislature did you meet Senator French? A. Well, I met Senator French several times in the city.

Q. Did you have any conversation with him at that time in reference to legislative work? A. No, sir.

Q. How long have you known Senator Wright? A. I first met Senator Wright when he was in the Assembly two years ago.

Q. Have you continued your acquaintanceship with him since then? A. I do not recall having met him again until this session.

Q. And how soon after the opening day of the session did you meet him? A. The first day I was in here.

Q. Were you familiar with the appointments made to the Committee on Commissions and Retrenchment? A. Yes sir.

Q. When did you become familiar with the personnel of that committee? A. Well, I suppose almost as soon as it was made, because everybody—every newspaper man—knew the personnel of the com-

mittee, knew it had some important work ahead of it, and was in duty bound to keep track of its movements and its members.

Q. What important work were you informed that this committee had ahead of it? A. Investigation of the Continental Building and Loan Association.

Q. By whom were you informed that it had that work ahead of it? A. I guess my first knowledge of that was possibly in the newspapers.

Q. What newspaper mentioned that? A. Well, I do not know.

Q. How soon after having that information from the newspapers did you speak to any member of the committee about the important labor which lay before it? A. I think the first meeting they had.

Q. And when was that? A. I do not recall.

Q. Whom did you speak to about it? A. I could not tell.

Q. Was it one of these four? A. That I could not say.

Q. The other three have testified they never spoke to you at all. I wish to know whether or not it was from some member of the committee. A. In what regard?

Q. That you learned that fact? A. In what regard?

Q. Of the important work that this committee had undertaken to investigate and ascertain in what way corporations and commissions were doing business as in this State? A. I spoke with Mr. Bunkers—Senator Bunkers.

Q. Was it from Senator Bunkers and immediately after the organization of this committee that you were advised and informed that it proposed the investigation of the Continental Building and Loan Association? A. I think it was from the general talk in the air, Mr. Nicol.

Q. You say you spoke with Senator Bunkers in reference to that subject? A. I spoke to Senator Bunkers going over on the boat the day before I saw Mr. Grange.

Q. What was that conversation? A. I asked Senator Bunkers, he was chairman of the committee—I asked him if they were going to investigate all the building and loan associations, and he said that he thought that they would.

Q. Did he tell you anything at that time in reference to there having been any subpoenas issued? A. He did. He told me——

Q. (Interrupting.) What day of the month was that? A. I suppose that was about the 20th of January.

Q. And where were you going when he told you that? A. We were going into San Francisco on the ferryboat.

Q. Did he tell you for what organizations or corporations subpoenas had been issued by this committee? A. He told me that there were a number of subpoenas issued, and that there was a man there had come down on that train or had come down in the morning, and my understanding was that it was for the get-rich-quick concern.

Q. Did he tell you how many subpoenas were issued? A. I do not think he did.

Q. Did he mention anything about a subpoena being out at that time for the Continental Building and Loan Association? A. I think he did.

Q. Did he tell you at that time of any subpoena being out for the Renters' and Phoenix? A. No, sir. I asked if there was any subpoena for the Phoenix, and my impression is that he said that there was or that there would be.

Q. Did you say anything to him about withholding the service of that subpoena? A. Yes, sir.

Q. What did you say to him in that particular? A. I told him that I was interested with regard to the Phoenix, and that I would like to see Mr. Grange before anything was done in that matter.

Q. Did he agree to that? A. He did.

Q. Was anything said about withholding the service of the subpoena on the Continental Building and Loan Association? A. No, sir.

Q. Was anything subsequently said about that? A. Withholding the subpoena on the Continental Building and Loan Association?

Q. Yes, sir. A. No, sir.

Q. Then it was at that time suggested by you and agreed to by Bunkers that the subpoena which he advised you was in the hands of some person for service, so far as the Renters' and the Phoenix were concerned, should be withheld until you should see Mr. Grange? A. Not the Renters'.

Q. The Phoenix? A. Yes, sir.

Q. Did he tell you how long the service would be withheld? A. He said until Tuesday night.

Q. Did he advise you that an investigation was on hand for Tuesday night? A. He said that there had been some information received with regard to the Phoenix—he said with regard to several, and I asked him if he had received any information with regard to the Phoenix, and he said there had.

Q. Did he mention Tuesday night as the time of the investigation of the the Phoenix, or that any other institution was to be investigated at its committee rooms in Sacramento? A. I think he said Monday night.

Q. Are you sure of that? A. I am sure of it.

Q. Did you say anything about having a continuance of that investigation? A. I asked for a continuance of the Phoenix.

Q. To what time did you ask it? A. Until Tuesday night.

Q. Was it continued? A. Well it was not brought up.

Q. You preferred that request to Senator Bunkers'? A. Yes, sir.

Q. Did you speak to either Senator Wright, Senator Emmons, or Senator French with respect to that? A. No, sir.

Q. But it is a fact that the investigation that you were informed was set for Monday night was in fact subsequently, and with no further suggestion from you, continued to the very time that you have specified?

MR. ALEXANDER: I think the records of the meeting will show what happened them.

MR. NICOL: I am going to call for them by and by.

MR. ALEXANDER: This witness cannot tell; he was not there.

MR. NICOL: We submit the objection.

THE CHAIRMAN: The objection is overruled.

MR. NICOL: Repeat the question, Mr. Vaughan.

(Question read.)

A. I collected from what I heard from him, that the investigation was to start with an investigation of the Continental, and that it was to go down the line, taking the Continental first.

Q. Was there any reason for taking up the Continental first? A. No, unless it was the most important.

Q. Was there any reason given by Senator Bunkers or any other of

these four Senators as to their desire to examine the Continental?
A. Any reason?

Q. Yes, sir. A. No, sir; not to me.

Q. Did you hear it discussed between them? A. No, sir.

Q. It was on a Saturday, you say, January 21st, 1905, that you called on Clarence Grange at his residence in San Francisco? A. Yes, sir.

Q. At what time of day did you call there? A. It was about 6 o'clock; maybe a little later.

Q. Who let you into the house? A. Mr. Grange.

Q. And how long were you there? A. Fifteen or twenty minutes.

Q. At that conversation did you tell him about this meeting with Mr. Bunkers—Senator Bunkers? A. I don't think so.

Q. Did you at that meeting refer to the fact that subpoenas were out for the Phoenix, and that you had made this request for a continuance of this meeting? A. I either told him that they were out, or that they would be out, and that I had made the request.

Q. You testified that you called at Mr. Grange's residence on Sunday, the 22d of January? A. Yes, sir.

Q. At what time of the day did you call? A. I think between 1 and 2 o'clock.

Q. Who let you in on that occasion? A. Mr. Grange.

Q. How long were you there? A. Perhaps twenty minutes.

Q. At that time did you say anything as to meeting Senators Bunkers and French at any place in San Francisco? A. I spoke of having met Senator Bunkers, and that he had told me that he had an appointment with Senator French later in the afternoon and told me to be back at 3 o'clock in the afternoon to meet both of them.

Q. Where did you say you were to meet Senators Bunkers and French at that time? A. At Senator Bunkers' place.

Q. Where is that place? A. On Market street, near Eighth.

Q. Did you meet him there? A. Yes, sir.

Q. Did you converse with him about this committee work? A. Yes, sir.

Q. What did you say to him? A. In substance I asked him—I asked him if he had seen Senator French and he said yes; he said Senator French said that it would require five hundred dollars apiece to take care of the Phoenix and the other institutions.

Q. How long were you with Senator Bunkers at that time and place? A. About fifteen minutes.

Q. Did you visit Mr. Grange's place of residence again on that day? A. Yes, sir.

Q. At what time of the day? A. It was after 4.

Q. Was it about 6? A. No, sir; it was not that late.

Q. Do you remember who let you into the house? A. Mr. Grange.

Q. In that conversation was anything arranged between you and him? A. Yes, sir.

Q. As to sending a telegram to you signed by any particular name? A. Yes, sir; if the occasion arose where he would have to send a telegram he would sign his name "Bill Newell."

Q. On the following day did you receive this telegram? A. Yes, sir.

Q. Where is the telegram? A. It has been destroyed.

Q. What was the substance of that telegram? A. To "Call me up on the telephone at 5 o'clock. (Signed:) Bill Newell."

Q. Did you call him up on the telephone? A. Yes, sir.

Q. At what office? A. At the Phoenix office, Bush 345.

Q. In Sacramento? A. San Francisco.

Q. Bush 345? A. Yes, sir.

Q. Is that the telephone number? A. Yes, sir.

Q. After your arrival in Sacramento, did you receive from Mr. Grange a telegram signed Bill Newell? A. Yes, sir.

Q. What was the substance of that telegram? A. That was the telegram.

Q. Then you did not call him up until you went to San Francisco?

A. No, no; I called them up from here that Monday afternoon.

Q. I was trying to get the telephone office in Sacramento from which you called him. A. Oh, I called them from the building here.

Q. You say that telegram has been destroyed? A. Yes, sir.

Q. When did you give Mr. Grange your residence in Sacramento? A. On Sunday.

Q. What number did you give him? A. 1116 Seventh street.

Q. Did you meet Mr. Grange in Sacramento on Friday, January 27th? A. Yes, sir.

Q. Where did you meet him? A. Capital Hotel.

Q. At the Capital Hotel? A. Yes, sir.

Q. Did you then and at that place have a conversation with him? A. I did.

Q. What was that conversation? A. Well, I had quite an extended conversation with him.

Q. In the course of that conversation did you tell him of having paid these various Senators of this State— A. (Interrupting.) Yes, sir.

Q. —these amounts of money? A. Yes, sir.

Q. Did you say anything as to any grievance that Mr. Bunkers had expressed? A. Yes, sir.

Q. What did you say to him about that? A. I told him that Senator Bunkers claimed to have been paid fifty dollars short. I told him that I presumed that either Senator French or Senator Emmons got the extra fifty, because I was pretty certain that Mr. Tichenor counted out fourteen hundred dollars.

Q. Let me ask you, Mr. Jordan, if the same money which Mr. Tichenor gave to you in these several packages or rolls was the identical money which you handed to these several Senators? A. Yes, sir.

Q. You had not changed the rolls? A. I had not opened any of the rolls except that that was to go to Senator Wright. That was the last roll that I had, and when Senator Bunkers told me in the morning that he was short fifty, I told him: "The only roll I have left is that to go to Senator Wright, and I will go and count that"—and I went to my room and counted it and found there was seven bills there.

Q. But those bills were the same bills you received from Mr. Tichenor? A. Yes, sir.

Q. And these other bills that you delivered to these Senators in the manner you testified last evening were the identical bills that you received from Mr. Tichenor at the time you state? A. Yes, sir.

Q. What did you do with the bills which you obtained? A. I took them down to San Francisco. I changed two of them.

Q. Where did you change them? A. Well, I changed one of them in the Phoenix.

Q. On what day? A. On Saturday; that would be Saturday, the 28th.

Q. Do you know who waited upon you while you were changing that bill? A. Yes, sir.

Q. Who? A. Mr. Horace Platt.

Q. What is his position? A. Cashier.

Q. How long have you known him? A. A great many years.

Q. Where did you change the other bill? A. I am a little hazy on that proposition; I do not know exactly where that went to; it went to pay a bill—to pay out something.

Q. Was the bill which you changed at the paying teller's window by Mr. Platt one of the same bills which you had received from Mr. Tichenor? A. Yes, sir.

Q. I do not suppose you took note of its number or observed whether it was marked or not? A. I did not, sir.

Q. So that you could not identify that bill if it was presented for your consideration at the present time? A. No, sir.

Q. Do you know what these Senators did with their bills? A. I do not, sir.

Q. Did they ever advise you? A. Never did.

Q. Did you ever speak to them about it? A. No.

Q. Did they say anything to you after Monday, the 30th day of January, 1905, about that matter? A. Well, I had discussed about Senator Bunkers' fifty.

Q. When? A. Well, I spoke to Senator Wright about that. That was the day I paid him, and I also spoke to Senator Emmons about it.

Q. You narrated those conversations last evening? A. Yes, sir.

Q. What I desire you to testify to, Mr. Jordan, is whether or not subsequent to Monday, the 30th day of January, after Mr. Corbin's affidavit was read in this place, you had any conversation with either of these Senators with respect to any of these bills. A. After that Monday?

Q. Yes, sir. A. Yes, sir.

Q. When did you have any conversation with them? A. On Monday night.

Q. With whom did you have that conversation? A. I went to Senator Emmons' room.

Q. Where is that room? A. In the State House.

Q. Whom did you meet there? A. Senator Emmons.

Q. What was the conversation? A. I asked Senator Emmons to get the Senators together and get their money and give it back to me—was the only solution out of the difficulty.

Q. What did he say? A. He said: "Can I trust you?"

Q. And you replied? A. I says: "Of course you can trust me. You have got to trust me. What good is the money to you? It is marked. It is dead money. What is the good of your holding onto it?"

Q. What information did you have at that time that this money was marked? A. I read it in the "Bulletin."

Q. Had Senator Emmons read it? A. I don't know.

Q. From that conversation that you had with him, did he seem to understand that the money was marked? A. He did.

Q. Then the substance of the conversation was he had the money—

MR. CATOR (interrupting): One moment. I object to leading.

MR. NICOL: It is cross-examination and I have a right to lead.

MR. CATOR: Cross-examination should not be abused under these

circumstances. It is true the committee has allowed examination of this witness, but I suppose the committee will be disposed to prevent leading questions of this witness even if it is cross-examining.

MR. NICOL: Even though I have that right, gentlemen, I will not presume to exercise it.

MR. CATOR: I mean suggestive questions.

MR. NICOL: Mr. Vaughan, will you repeat the question so far as I have gone with it, so as to give me the cue?

(Question read.)

MR. NICOL: Strike it out. Q. In this conversation which you had on Monday night at Senator Emmons' room in the city of Sacramento, what money were you and he speaking about? A. Money that I had paid to the four Senators.

Q. You said that you thought it was advisable to get the four Senators together and gather the money up? A. I said it was advisable to gather the money up, no matter how he got it.

Q. What did he say in response to that? A. He said: "Can I trust you?"

Q. And when you answered that he had to trust you, what did he say? A. I said the money was marked, and it would be impossible for him or any of the Senators to pass it; it was absolutely dead money. He says: "That is so."

Q. Who were present at that conversation? A. Only he and I.

Q. Did you meet the other Senators with him after that? A. I saw Senator French alone.

Q. Where did you see him? A. Across the street from the State House on the corner of Tenth and K.

Q. At what time? A. I think that was about between 6 and 7 o'clock.

Q. Did you speak to him of this money? A. Yes, sir.

Q. What did you say? A. I asked him to—I told him that the best thing to be done under the circumstances was to get the money together—put it all together and give it back to me. He said: "What money?" I says: "What are you talking about; you know what money." He says: "What paper are you on—the 'Bulletin'?" I says: "Don't be absurd; of course I am not on the 'Bulletin'; I am on the 'Post.'" He says: "I don't know anything about any money." Then later on I saw Senator French down at the cigar store below the State House and I spoke to him again. I says: "Will you go up and see Senator Emmons at his room at the State House; he would like to see you very much." He said he would; and before I left Senator Emmons he said the money would all be on hand in the morning and be handed to me.

Q. Did you see Senator Wright about the money? A. I don't think I did that night.

Q. Did you see him the next day? A. I do not recall.

Q. Did you see Senator Bunkers about the money? A. Yes, sir.

Q. When did you see him and speak to him on that subject? A. I saw him that night—walked down Tenth street over to the Capitol.

Q. Did you have a conversation with him about it? A. It was more of a talk than a conversation.

Q. Give it. A. I told him that the only thing to do was, just as I had told Emmons, to get the money together and get it back into my hands.

Q. What did he say? A. He seemed to be wildly incoherent—did not know what to say or what to make of the suggestion.

Q. Did he tell you what he had done with his money? A. No, sir; I did not ask him.

Q. Did he tell you he had parted with some of it? A. No, sir.

Q. Did either of the Senators tell you what they had done with it? A. No, sir; I did not ask any of them.

Q. None of them told you they had parted with any of it? A. No, sir.

Q. Did you see them the next day? A. No, sir.

Q. That was Tuesday. Did you have any conversation with them again about this money? A. That was Monday night. I went down to San Francisco on the 4 o'clock train the next morning and I returned on Tuesday night, and on Tuesday night when I reached here, I was apprehended by the District Attorney.

Q. So that you had no further conversation with them? A. No, sir.

Q. Did you see Senator Bunkers in San Francisco? A. Yes, sir—no, sir; no, I did not; I saw him on the boat coming home—coming back to Sacramento, was the first time I had seen him.

Q. Do you know whether or not it is the fact that he left here on the morning of January 31st, on the morning train that leaves here at 4 o'clock, and proceeded to San Francisco? A. That same train on which I left?

Q. I do not know, Mr. Jordan, it is the one that you went on. Do you know what train he went on? A. I think he went on that train; he told me so.

Q. Do you know where he went in San Francisco? A. No.

Q. He told you nothing, then, about the purpose of his visit, the person he visited, or inquiries he made in San Francisco respecting any money? A. No, sir.

Q. How soon after the reading of the affidavit in the Senate on the 30th day of January, 1905, did you see either of these Senators? A. On the day after the reading of the affidavit?

Q. On the day of the reading? A. On the day of the reading?

Q. Yes, sir. A. I saw them that evening—saw three of them.

Q. Where did you see them? A. I saw Senator Emmons at the State House; I saw Senator French on the corner right opposite the State House on the corner of Tenth and K, and I saw Senator Bunkers going over to the Capitol.

Q. Did you see them or either of them immediately after the reading of the affidavit here? A. I saw them on the floor of the Senate here.

Q. Did they speak to you? A. No, except in a general way.

Q. What did they say, if anything, about this matter? A. Nothing to me.

Q. Did you meet any of them in the plaza about this Capitol shortly after the reading of the affidavit? A. Not to my recollection.

Q. Did not Senator Bunkers come to you and take you away with him? A. From the Capitol?

Q. Yes. A. At what hour?

Q. At about the hour of half-past 12 o'clock? A. I do not recall that.

Q. Did you telephone to San Francisco to any person on the afternoon of January 30th with respect to the matter that was spoken of in this affidavit— A. (Interrupting.) Yes, sir.

Q. — of William Corbin. To whom did you telephone? A. Mr. Grange.

Q. From where did you telephone? A. From the Surveyor-General's office.

Q. And what did you telephone? A. I told him that there had been an awful row up here; I think my words were that "hell had broken loose. "I told him that I understood that the "Bulletin" was going to send a special train up here with a four-page story of what had occurred, giving the history of the entire transaction with which he and I were familiar, and I wanted him to get a "Bulletin" and find out if my name was used in conjunction with it.

Q. Had you before that time read the affidavit? A. Yes, sir.

Q. You had observed that your name was not mentioned in the affidavit? A. Yes, sir; I was here when the affidavit was read.

Q. You spoke of visiting the committee rooms of the Committee on Commissions and Retrenchment the evening that Mr. Tichenor was here, and that you were unable to gain access to the committee rooms or an audience with Senator French.

Q. Do you know who was under investigation that night? A. No, sir.

Q. Had you been informed of any investigation being conducted before that time? A. Well, my information before that time was that investigations were going on all the time.

Q. Who informed you of that? A. Well, on one occasion Senator Coggins told me that I should have been up at the committee meeting that night. That was the Bardwell—some other name—syndicate. It was under investigation, and he said: "I cannot tell you anything about it." He says: "We are bound to secrecy; it was an executive session"; but every time I would meet any of the Senators—why, they would say that the thing was all in executive session, and that there was absolutely no news to be given out.

Q. You spoke of a negro boy, a page or porter, to whom you referred your request for an audience with Senator French. What was the name of that boy? A. I do not know.

Q. What position did he occupy with respect to this committee, do you know? A. I do not know; he seemed to be acting in the capacity of sergeant-at-arms.

Q. Had you ever visited the committee rooms? A. Never.

Q. Were you up in the committee rooms at all? A. Never.

Q. Then you never had any knowledge of these proceedings or the business that was being conducted at these committee meetings? A. Never.

Q. Did you ever examine its records? A. No, sir.

Q. Do you know who was its clerk? A. No.

Q. Then all the information you received was received from the Senators themselves? A. It must have been.

Q. You do not remember of having spoken to Senator Coggins about it, do you—or Senator Rambo, or Senator Bauer? A. I never spoke to Senator Coggins but once, and that was at the time that the Bardwell Syndicate was up there.

Q. Did you speak to any of these other Senators about any matter connected with that committee at all? A. Yes, sir.

Q. When? A. On several occasions in a general way I asked them what was going on.

Q. Did they tell you? A. No, sir.

Q. Did you ever see the subpoenas which were issued by this committee? A. I never did.

Q. Did they tell you for whom the subpoenas were issued, except in this conversation you had with Senator Bunkers on the boat? A. My recollection is that it was generally known here that there was going to be a subpoena issued for Mr. Corbin.

Q. I am speaking about these other subpoenas—for the Phoenix and the Renters'. A. Did they ever tell me any names?

Q. I am asking you that. A. No, sir.

Q. You testified last night that you were advised by Senator Bunkers that they could not treat the Continental Building and Loan Association with any measure of senatorial complaisance, except for a commission of ten thousand dollars, besides commissions, was forthcoming. Did they tell you why? A. Well, Senator Bunkers said that would be the least figure—smallest figure.

Q. Did he tell you why? A. Yes, sir; he said that there had been so much stir raised about it, and that if a favorable report was sent in it was going to raise Old Ned with all these Senators, and they would have to stand the brunt of it, and they deemed that they should be well paid for that work.

Q. Did he state that newspaper attacks had been made upon that and they could not afford to stand that for anything less? A. Yes, sir; he did.

Q. By what paper did he say attacks would be made if they made a favorable report as far as the Continental Building and Loan Association was concerned? A. He said: "You know the 'Examiner' will be watching every move on that proposition, and we have got to be pretty careful what we do."

Q. But they were willing to do it for at least ten thousand dollars so far as his statement was concerned? A. Nothing less than that would be accepted, he said.

Q. Was anything said as to how much more would be required? A. No; he seemed to be a little hazy on that point.

Q. Did he mention any other price or schedule for other associations? A. Not except those three that were mentioned.

Q. Those were the only three that prices were mentioned for. A. Yes, sir.

Q. And the Continental—that makes the third? A. Makes the fourth.

Q. Makes the fourth. Was there anything said by either of those Senators with whom you were dealing, to the effect that if those organizations to which they were directing their attention, in the event that they did not yield to their demands, that they would bring measures in to forfeit their charters? A. Yes, sir.

Q. What was that conversation; when was it had, and by whom? A. That conversation was had between me and Senator Bunkers on that night going over to the city on the ferry

Q. What did he say with respect to that? A. He said that "these

building and loan associations are apt to lose their charters if they are not careful;" there was a big kick against them.

Q. Did he say to you what he understood about being careful?
A. No.

Q. Did he say anything about the danger of the loss of their charters being consequent upon their failure to recognize this committee?
A. No; he did not put it in that way.

Q. Was that the substance of his suggestion? A. That was an open suggestion; it was not well defined; I could take it that way, I suppose.

Q. You understood it, did you not? A. I had an idea I did, but there was nothing said but what would be merely a suggestion of that idea.

Q. About how early in the session were you advised that this Committee on Commissions and Retrenchment was to engage in the interesting business of examining building and loan associations? A. Why, I never had a talk with any of the men until that night going down on the boat.

Q. Was Dodge's name mentioned in connection with any conversation that you had with any of these Senators? A. No, sir.

Q. Was there anything said about Senator Emmons taking hold of any matter with respect to Dr. Dodge? A. Not to me.

Q. Not that you remember of? A. No, sir.

MR. NICOL: I think that is all, gentlemen.

MR. ALEXANDER: No questions.

THE CHAIRMAN: Have you any questions to ask, Mr. Cator?

MR. CATOR: None at all.

THE CHAIRMAN: That is all, Mr. Jordan.

(Here Mr. Jordan left the witness stand.)

THE CHAIRMAN: Have you any other witness?

MR. NICOL: Has the other side closed?

THE CHAIRMAN: Have you any other witness, Mr. Cator?

MR. JACOBS: Is the prosecution in yet, Mr. Chairman?

THE CHAIRMAN: I suppose it is.

MR. NICOL: The prosecution only has rebuttal.

MR. CATOR: I would like to know whether the prosecution have got through—what calls itself the prosecution here.

THE CHAIRMAN: They have so stated that they were.

MR. ALEXANDER: The prosecution without a name.

THE CHAIRMAN: I desire to set this point right as to Mr. Jordan. Mr. Jordan's subpoena was issued by me at the suggestion of Senator Simpson some three or four days ago. We desired to have Mr. Jordan where the committee could get hold of him when they wanted him, and the committee had intended to put Mr. Jordan on when the prosecution and defense had finished, and in case he was not called by either side; but they would have allowed him to be called by either side, had they so desired, and when Mr. Jordan was put on the stand last night, as I understand it, he was put on by the committee, after the defense had said that they had no more witnesses, and that the committee had ruled that they would ask the question of the Senate whether we should receive the testimony from the Senators under oath or not. I think that this statement should be made in all fairness. The committee has endeavored to be just as fair as it could be to both sides.

MR. CATOR: There has not been any complaint, Mr. Chairman. I

understood the subpoena was there. I was up there when you issued it, and saw you hand it to the Sergeant-at-Arms, and I told my friends that I thought the committee would secure Mr. Jordan's presence to a certainty, but I objected to the cross-examination in good faith because I thought that the party, although called by the committee, was in fact a part of the prosecution, but it is all over with now.

THE CHAIRMAN: You understand, Mr. Cator, this is not exactly a court; this is an investigation where we are trying to get through.

MR. CATOR: I have learned that by resolution of the Senate to-day, if I ever had any doubt about it.

THE CHAIRMAN: Some times in court we do not always get the truth. We want to get the truth here if we can. And therefore this statement of the committee is made as to the issuing of the subpoena for Mr. Jordan. It was issued on February 2d.

MR. CATOR: Nobody has denied it.

THE CHAIRMAN: February 2d is the date of issue of the subpoena, and it was returned on February 6th.

MR. CATOR: There is no question about it. I saw the subpoena issued on that day. I was up there and I saw you hand it to the Sergeant-at-Arms and knew it was issued by the committee at that time. There is no question about those matters.

THE CHAIRMAN: There is one question that the committee desires to ask you, Mr. Jordan, if you will please take the stand.

(Here Mr. Jordan returned to the witness chair.)

THE CHAIRMAN: Q. You stated that you requested Senator Emmons to gather the money together and give it to you the next morning; I understood you so? A. Yes, sir.

Q. Was the money gathered together and given to you the next morning? A. I was not here the next morning.

Q. Was the money ever gathered together and given to you? A. No, sir.

Q. That is all. A. That is, I do not know about its being gathered together; it was never given to me.

MR. McNAB: Senators, I understood from counsel on the other side that they were not going to place any more character witnesses on the stand. We had subpoenaed some under the supposition that that line of testimony was going further. If it is the intention of counsel on the other side not to call any more character witnesses, we will not tax the time of the committee by putting any more on and exhausting our allotment of twenty-five, although some are under subpoena. Do I understand, Mr. Cator, that you are not going to put any more impeaching witnesses—character witnesses—on the stand?

MR. CATOR: I think not. There are none here.

MR. McNAB: Then we will not, may it please the Senators, place any more witnesses on the stand. We will excuse them.

TESTIMONY OF J. A. VAUGHAN.

(Reported by WARREN E. DOAN.)

Sworn.

MR. SIMPSON: Q. Mr. Vaughan, what is your business? A. Law reporter.

Q. Are you in the employ of the Senate in such capacity? A. Yes, sir.

Q. Did you have any work to do for the Committee on Commissions and Retrenchment? A. Yes, sir.

Q. Do you remember the first meeting of that committee that you attended? A. Yes, sir.

Q. When was that? A. That was on Monday night, the 23d of January.

Q. Where was it held? A. At 817 Tenth street—the committee rooms of the Committee on Commissions and Retrenchment.

Q. Who were present at that meeting? A. Well, I would prefer to get my records on that matter.

Q. Have you your records here? A. Yes; I have them locked up downstairs; it will take me about three or four minutes to get them.

MR. NICOL: We were going to call for those ourselves.

THE CHAIRMAN: We will take a recess until you get your notes.

MR. ALEXANDER: We, so far as we are concerned, submit the records to the committee—I mean submit them to the committee to be bound over and not take up the time of the session.

THE CHAIRMAN: That is all right; that is very kind; but we would prefer to have you get your notebook, Mr. Vaughan.

(Mr. Vaughan left the room to procure his notebooks.)

MR. McNAB: We suggest that we would like to have the subpœnas that were placed in the hands of the Sergeant-at-Arms on behalf of this committee or by its authority made part of the record of this committee and brought here as exhibits. I suppose it will be necessary for an order of this committee to have the Sergeant-at-Arms produce them if he has any.

THE CHAIRMAN: The original subpœna?

MR. McNAB: The original subpœna.

THE CHAIRMAN: From the other committee, do you mean?

MR. McNAB: From the Committee on Retrenchments and Commissions—the subpœnas that were issued.

THE CHAIRMAN: You mean the subpœnas that were issued for Mr. Corbin?

MR. McNAB: No; there were six subpœnas.

MR. NICOL: There were six subpœnas, and we desire to have the subpœnas to show who was subpœnaed and when they were subpœnaed to be present.

(The Chairman directed the Sergeant-at-Arms to bring before the committee the subpœnas referred to.)

MR. NICOL: We would like to have the Sergeant-at-Arms sworn, Mr. Chairman, and read them into the record in connection with this testimony.

(Sergeant-at-Arms Martin left the room and soon afterwards returned with the papers, and said: "Those were given to me by the chairman of the Committee on Commissions and Retrenchment—Chairman Bunkers.")

TESTIMONY OF J. LOUIS MARTIN.

Sworn.

MR. SIMPSON: Q. You are the Sergeant-at-Arms of the Senate? A. I am.

Q. I hand you these seven documents purporting to be subpoenas of the Committee on Commissions and Retrenchments, and ask you if they come from your possession at this time? A. Yes, sir; all right.

Q. From whom did you get these subpoenas? A. From the Chairman of the Committee on Commissions and Retrenchment.

Q. Senator Harry Bunkers? A. Yes, sir.

MR. NICOL: I would like to have them read into the record, Mr. Chairman. I would like to have them copied in with particular questions.

Q. Mr. Martin, I call to your attention a subpoena which is signed "Harry Bunkers," and bears date January 24th, addressed or commanding you to serve one Richard Chase, of Oakland, California, to appear as a witness before the Committee on Commissions and Retrenchment on the 28th day of January, A. D. 1905, at the hour of 2 p. m., and ask you to testify if that is a subpoena which you received about the date mentioned from Harry Bunkers, chairman of that committee. A. (After examining.) Well, it was either handed to me by Senator Bunkers or Senator French; I would not be sure.

Q. One of the committee? A. Yes, sir.

MR. NICOL: It is offered in evidence Mr. Chairman, and I would like to have it copied in the record, please.

(Subpoena marked Exhibit "A"—J. A. Vaughan, Reporter.)

Q. I call to your attention a subpoena issued by Harry Bunkers, chairman, dated January 22d, 1905, commanding you to subpoena one Emil Gunzenberger, and ask you if you also received that from the Chairman or some member of the committee about this date? A. That was given to my deputy, if I remember right, Mr. Tuite.

Q. You know it was received— A. (Interrupting.) Came through my office.

MR. NICOL: That is also offered in evidence.

(Subpoena marked Exhibit "B"—J. A. Vaughan, Reporter.)

THE CHAIRMAN: You are not asking that these subpoenas in full be placed in the record?

MR. NICOL: Yes, sir; I would like to have them.

THE CHAIRMAN: What is the necessity for that?

MR. NICOL: I am preserving these matters in order to show that these matters were pending before the committee.

THE CHAIRMAN: Can you not state in brief that these subpoenas were issued and these gentlemen were subpoenaed to appear, and then put one form in? Why put them all in? It seems to me that is unnecessary.

MR. NICOL: If I could always be sure that these several subpoenas would be on hand when called for.

THE CHAIRMAN: They will be in the hands of the investigating committee, and will be turned over by the investigating committee to the Senate.

MR. NICOL: Then I do not care to encumber the record.

THE CHAIRMAN: It seems to me it would be unnecessarily encumber-

ing of the record to have them put in that way, and it seems to me it would meet your requirements to put in certain subpoenas for certain parties, and that they were signed by the chairman.

MR. NICOL: You will note those names, Mr. Vaughan?

Q. I call your attention to a subpoena commanding you to subpoena C. T. Stewart to appear before the Committee on Commissions and Retrenchment on the 26th day of January, A. D. 1905, signed Harry Bunkers, dated Sacramento, Cal., January 24th, 1905, and ask you if that came from some member of this committee? A. (After examining.) Yes, sir, that was handed to my deputy, too.

MR. NICOL: That is offered in evidence, Mr. Chairman.

(Subpoena marked Exhibit "C"—J. A. Vaughan, Reporter.)

Q. I call your attention to another subpoena of the same form, addressed to you, commanding you to serve one F. C. Havens, and directing him to produce certain books of a certain corporation known as the Realty Syndicate Company of Oakland, and ask you if that was also received from this committee, it being dated January 24th, 1905? A. It was.

MR. NICOL: That is offered in evidence, Mr. Chairman.

(Marked Exhibit "D"—J. A. Vaughan, Reporter.)

Q. I call to your attention a subpoena commanding you to serve ——— Bardwell, 44 Crossley, and to produce certain documents and papers, dated ———, ———, and signed "Harry Bunkers," and ask you if you received that also? A. Yes, sir; that was given to the deputy. Many of these were not handed to me, but were handed to the two deputies.

MR. NICOL: That is also offered in evidence.

(Marked Exhibit "E"—J. A. Vaughan, Reporter.)

Q. I call your attention to a subpoena dated January 20th, addressed to you, commanding you to serve one A. B. Harrison, 916 Market street, with American Realty and Bond Co., and commanding him to produce certain books, papers, and so forth, signed "Harry Bunkers," and ask you if that was received by you? A. That was turned over to me by one of the deputies as having been served.

(Marked Exhibit "F"—J. A. Vaughan, Reporter.)

Q. And then there is one addressed to William Corbin, and commanding him to appear here, with a list of the books of the Continental Building and Loan Association. A. This came to me by some deputy—passed over to me.

(Marked Exhibit "G"—J. A. Vaughan, Reporter.)

Q. Where are the subpoenas that were handed to you directing you to subpoena officers of the Phoenix Insurance Company? A. None of them came to me.

Q. Were any of them handed to you, directing you to serve the Realty Syndicate? A. That is there—the Havens.

Q. Was any subpoena delivered to you directing you to serve the Renters' Association? A. Not to my knowledge.

Cross-Examination.

MR. CATOR: Q. Do you know how this committee came to occupy the room that has been mentioned? A. Yes, sir.

Q. Will you please explain that to the committee? A. When we arranged for the committee here, we found we were going to be short of

rooms, on account of the Library being occupied downstairs, and I mentioned to the Lieutenant-Governor it was possible we would have to have two rooms outside of the building, and he told me to go ahead and do what I thought best in the matter. I afterwards found I could get along with one room, and in making up committees I had in view the putting of the Committee on Public Morals, and the Committee on Commissions and Retrenchment and the Democratic minority in that room; and at that time I did not know, when I apportioned the rooms—did not know who was going to be on those committees at all.

Q. So it was not at the request of the committee? A. No, sir; not at all.

MR. CATOR: That is all.

THE CHAIRMAN: Any request on the part of the Democratic minority?

A. They thought they would meet in Mr. Curry's office, and that they would not require any.

THE CHAIRMAN: Does the committee desire to ask Mr. Martin any further question? That is all. It has been suggested that those subpoenas be marked Exhibits "A," "B," "C," "D," and so forth.

TESTIMONY OF J. A. VAUGHAN.

Resumed.

MR. SIMPSON: Q. Mr. Vaughan, have you your notes taken of the meetings of the Committee on Commissions and Retrenchment with you?

A. Well, I will answer that "yes," and then I would like to qualify it by stating that a note book of mine marked "Volume 1" has been lost or mislaid; but there was nothing serious in the matter, inasmuch as everything in that book was transcribed except the last few pages, and that volume of my shorthand notes contained the greater part of this transcript of the testimony and proceedings, which I now present to you, in the Bardwell-Ford Syndicate matter. This is a carbon copy. The original has been filed here with the Senate. That will give you the record of the first meeting—who was present there.

Q. This record of this investigation is almost altogether the testimony of witnesses given there on the investigation? A. Yes, sir; I was acting there exactly in the same capacity as I am acting here; I was not the committee clerk, any more than—

Q. Was this investigation of this Bardwell concern held with closed doors or open doors by the committee? A. Closed doors. When I arrived there they were in session. I was late that night, inasmuch as I had a great deal of correspondence to get out for Senator Wolfe; it was about three minutes after 8 before I got there, and at that time they were in session—they were in session there.

Q. Have you any notes of the remarks made there at any of these meetings; of members of the committee or proceedings of the committee, other than the examination of witnesses in the several investigations which they conducted? A. Well, I only have some very few notes. There was one executive session held there where there were some motions made, and I took those down just for the convenience of the committee at that time, as I have done in similar cases in other investigations. That was in executive session. I never took any discussion—in fact, I did not

pay any attention to it—but where a motion was made I took it down, thinking that they might want to know what the motion was.

Q. Well, how long did that session last that you speak of? A. This session on this Monday night—I remember it quite distinctly, and the record will show that it lasted—even if I did not remember it, my transcript would show that it lasted—until about a quarter to 12 o'clock.

Q. Well, without referring to your notes, I would like to ask you a few questions, Mr. Vaughan. A. Yes, sir.

Q. How many meetings of this committee did you attend? A. Well, will you allow me to refresh my memory from my notes?

Q. Yes, sir. A. I attended this meeting on this Monday night.

Q. What date? A. January 23d, 1905.

Q. Do you know whether any business was transacted on that evening? A. Well, the business of taking this testimony in this Bardwell-Ford Syndicate matter.

Q. Will you refer to your notes and see whether anything was said or done with reference to the Phoenix or Renters' Association at that meeting by the committee? A. I am almost positive there was not; if there was, this transcript will disclose it.

Q. You do not remember, independently of your notes, whether anything was done? A. I do not remember, but I feel quite sure that there was nothing at all at either one of those; if there was, it might have been at some time prior to the taking of this testimony, and to which I paid no attention. These gentlemen were engaged in conversation when I came into the room. I do not know whether you would call it that they had been called to order yet. There was Senator Coggins there, and Senator Rambo, and Senator French, and Senator Wright.

THE CHAIRMAN: Was that the first meeting of the committee that you attended? A. That was the first—this Monday night.

MR. SIMPSON: Q. When was the next meeting that you attended? A. The next meeting which I attended was on Tuesday, January 24th, 1905.

Q. Do you know what the business of that meeting was? A. They investigated a concern—two young men appeared before the committee; the names of the young men were: one was a Mr. Hennessey, a young attorney, and the other was a Mr. Harrison. The investigation took but a very few minutes, and that was in the last part of that volume which I tell you has been lost or mislaid; but the last few pages of that I have here. As Senator Coggins stated the other night, it took just about exactly a half an hour.

Q. Was anything discussed, or any business taken up, or any discussion had at any of these meetings that you have testified to so far, other than the mere examination of witnesses, or the investigation? A. Well, there was talk going on there to which I paid no attention. The members of the committee talked very freely amongst themselves—Senator Emmons, Senator Wright, and Senator Bunkers.

Q. Now, have you any note of these conversations? A. No; certainly not; I was not requested to take it down, and therefore I did not consider it my duty to.

Q. Well, you did not take it down? A. No, sir; certainly.

Q. Will you state the substance of any of those conversations? A. I do not remember any of them. I did not pay but very little attention

to them. What I depend on is my records, and not my memory. It was an executive session.

Q. Have you any independent recollection of any discussion on the question of holding these meetings with closed doors? A. Well, up to this time, this Tuesday, there was not any discussion that I know of. I say they were in executive session. There was nobody in the room outside of the committee and myself, and any witness who was called.

Q. Well, were you present at any meeting of this committee when it was determined that meetings should be held with closed doors? A. Yes. If you will allow me to state about these meetings in chronological order, so as to keep it in its proper sequence. After they got through investigating these two young men, why they were excused, and I was told it was not necessary to transcribe that testimony. The last four pages of that I have here, in which Mr. Harrison spoke and also Senator Emmons and Mr. Coggins.

Q. Will you read from your notes? A. (Reading.):

MR. HARRISON: The gentleman who served the subpoena told me to have everything in concrete form and present it, and it has been considerable trouble, and I tried to do the best we can.

MR. EMMONS: You have made a good impression on us, but we do see danger in those certificates all depending on successful investments in order to meet them when they mature. The company is perfectly legitimate, and if I were you I would go very slow on those certificates, and our object here is to find out how the companies are doing business and report to the Legislature a bill that will have them under supervision, so that people may not be swindled out of their money.

MR. HARRISON: Our company is young yet.

MR. EMMONS: I think you have bit off more than you can chew on that seven-per cent proposition.

MR. HARRISON: I think if they found out the certificate was not what they anticipated it to be, they can drop it.

MR. EMMONS: I was going to suggest your dropping it.

MR. HARRISON: Then we can do a straight real estate business.

MR. COGGINS: It is the opinion of the committee that that is a bad feature of your business.

MR. EMMONS: Of course, if you had a paid-up capital to go on—for instance, if this three hundred thousand dollars was lying there, or was invested to meet this, I could see that the certificate proposition would be a lucrative business.

MR. HENNESSEY: Of course it is dangerous, drawing seven per cent.

MR. BUNKERS: Yes; and especially when you start in on a shoestring.

MR. HENNESSEY: The business is young.

MR. EMMONS: You are shining very bright with what we run up against last night. I want to tell you that none of this will be for publication that we have said; so far as we are concerned, nobody knows that we have been investigating or anything of that kind, and any report that goes, there will be no condemnation of your company.

MR. COGGINS: No names used at all.

MR. EMMONS: You will not be injured in any way, but we want to tell you that we think you are trying to do what is right.

MR. HENNESSEY: We appreciate that you are animated by a very laudable purpose. Of course I do not believe that any company can guarantee fifty per cent on any investment; if a bank can only guarantee three or four, and real estate six per cent, how can any one guarantee to pay fifty per cent?

MR. BUNKERS: I guess that is all the action the committee will take on this matter. You will be excused.

And we then proceeded with the Bardwell-Ford Syndicate matter again—all of which you have. I have here: "Tuesday, January 24th, 1905, 8:30 P. M. Before the Committee on Commissions and Retrenchments; present, Bunkers (Chairman), Senators French, Coggins, Emmons, and Wright"—that has been written out and transcribed.

Q. What was the next meeting you attended? A. The next meeting was on Wednesday, January 25th, 1905, at 2:30 P. M. I will state that I was working that day and night transcribing these notes, and that I apprised the committee of the fact that I would be subject to their call at any time.

Q. What was the business of that meeting? A. The business of that meeting was a continuation of the taking of testimony in the Bardwell-Ford Syndicate matter, or rather the conclusion of it. It was concluded at that session, the transcript of which is on file.

Q. After the conclusion of the taking of the testimony, what was done by the committee? A. Well, they adjourned that afternoon and I think the transcript will show that they adjourned subject to the call of the chairman. And I suggested to them that I would put that in, and they said all right.

Q. Have you attended any other meeting of the committee? A. The next meeting was held Wednesday, January 24th, 1905, at 8 P. M., in which Mr. Gunzenberger was examined, and that I was told not to transcribe.

MR. NICOL: Why?

MR. SIMPSON: Q. By whom? A. By the committee. It was kind of understood in the same way as I was told about these other two young men; that was a very short examination.

MR. COGGINS: There was nothing to it.

THE WITNESS: Then the next meeting was held on Thursday, January 26th, 1905, at 2 P. M. I have a transcript of what took place there in regard to Mr. Corbin—Senator Coggins telephoning down to the city for Mr. Corbin to know if he would come up—and also the testimony of a witness, John Stratman, which is in this transcript here which I now present to you.

MR. SIMPSON: Was that the last meeting you attended? A. Yes, sir; that was the last meeting I attended.

Q. Were any of these meetings executive sessions? A. The testimony of which is in that transcript handed you there of Mr. Stratman—John Stratman.

Q. In these executive sessions, were there outsiders or people there desiring admittance or admission to the room or committee? A. Well, there were witnesses waiting to be called, Senator Simpson. Whether anybody else desired admission or not, of course it is pretty hard for me to say—unless, I guess, some of the newspaper men would have liked to have gotten in there, as they do to executive sessions of any kind.

Q. You have no independent recollection of who suggested executive sessions? A. No, sir; I have not. As I say, when I came there, I was a little late; I was doing some work downstairs in the room that the Judiciary Committee meets in, and they were busy this Monday afternoon and I could not do my work there, and it was late, and when I came there they were in executive session. Senator Bunkers had told me to come there—the chairman of the committee—and Lou Martin had reminded me to be sure and be there, and I think one or two other members of the committee.

MR. RALSTON: Q. Who was the clerk of the committee? A. I do not know, Senator Ralston, anything about any clerk. I do not know whether they had one or not, or anything about it.

Q. Were you there at the organization of the committee? A. I never was there before this Monday evening that I speak of, when I came there, and they were sitting in the room—I do not know whether you would call it in session; they were there talking around and telling

experiences and discussing building and loan societies, and these get-rich-quick concerns, etc.

Q. Then so far as you know, there was no clerk to that committee? A. I do not know anything about any clerk.

Q. I mean was the person there before the committee? A. There was nobody there except the Senators and myself and the witness under examination, except this last time when this Corbin matter came up, and Mr. Stratman's testimony was taken, and it was with open doors.

THE CHAIRMAN: I see the record here shows that Miss Bunkers was clerk of the committee?

MR. McNAB: Q. Mr. Vaughan, do you know in whose handwriting those subpoenas are? A. I have not seen the subpoenas—I put them in my pocket without looking at them. I will look at them, but I have no idea that I can tell.

Q. You did not make them out, did you, as clerk of the committee? A. I never made out a subpoena for the Legislature in my life.

Q. You do not know in whose handwriting they are? A. I have not the remotest idea.

MR. NICOL: Q. The only open meeting that you have any knowledge of is this one? A. Of which I have any record.

Q. You do not know anything about the arrangements made for the holding of secret sessions? A. Nothing whatsoever.

Q. Is this a correct transcript of all that took place in your presence that night? A. That afternoon—well, no, it is not, because there was considerable. There was quite a little bit of discussion there which the Senators have testified to which, of course, I did not take down. I was not requested to, and it was not testimony, and it was executive session amongst themselves.

Q. You did not take down any part of that discussion in the nature of an opposition made by certain of the Senators to the holding of secret sessions?

A. I did not take down any part of that discussion whatsoever. I did take down motions, merely to facilitate the business of the committee in case they should want to know what motions certain members made. In fact, I was standing up most of the time looking out the window; I did not pay any attention to it, because it did not interest me.

Q. By the record, it seems that one Miss Bunkers was the clerk of this committee. Did you ever see her there? A. I never saw any young lady there at any meeting at all.

Q. Well, it may be she is not a young lady. Did you ever see any lady there at all? A. I never saw any lady at all there.

Q. But you were not called upon to keep minutes of the proceedings of these meetings except to the extent that you have them transcribed? A. No, sir; I considered I was employed there in exactly the same capacity as I am here.

Q. When did you first discover this book containing some of the minutes was absent, or lost, or mislaid? A. Well, I cannot say that this book contained any of the minutes. It contained these few pages of examination of these two men. I think it was—oh, four or five days ago. As I say, nearly everything in that was transcribed except the last few pages, and those last few pages contained the testimony of these two young men. It contained a variety of miscellaneous matters—speeches of Senator Wolfe delivered in the Senate, and some correspondence.

Q. Look among your subpoenas and see if there is any for this man whose testimony you took that afternoon.

MR. McNAB: John Stratman—I would like to know if you have any subpoena for him. A. Amongst these subpoenas that you introduced in evidence in this?

Q. Yes, John Stratman, Berkeley? A. No, sir; I do not find it amongst these subpoenas which Mr. Nicol just handed to me to be introduced in evidence and marked as exhibits in this investigation.

THE CHAIRMAN: That is all.

MR. NICOL: That is all.

TESTIMONY OF AL. MURPHY.

Sworn.

MR. SIMPSON: Q. You are the representative or a reporter on the San Francisco "Examiner," are you not? A. Yes, sir.

Q. And in attendance on this session of the Legislature here? A. Yes, sir.

Q. In the affidavit of William Corbin filed in the Senate in this matter it is stated as follows: "Said agent further stated among other things, that certain 'Examiner' reporters, among them Al Murphy, commonly known as 'Blinker Murphy,' had been detailed by the 'Examiner' to watch and assist said committee; but that no fears need be entertained in dealing with members of the committee of any exposure in the 'Examiner.'" Will you make any statement you have to make in connection with this assertion? A. Yes, sir.

THE CHAIRMAN: Are you "Blinker Murphy?" A. I have written a good many articles under that name, and am known by that pretty well, generally.

Q. Will you proceed and make any statement you have to make? A. Prior to coming to Sacramento as a correspondent for the "Examiner" not a single word was said to me by anybody on our paper in regard to building and loan associations, so far as bringing proceedings was concerned. The first time that I had any idea that the building and loan associations were to be investigated here was on the 17th day of January. It was Tuesday, in front of the Golden Eagle Hotel. Senator French came to me and he said to me that his committee was going to investigate the building and loan associations. "I understand that the 'Examiner' has a good deal of information concerning it," he said; "I wish you would furnish me with what information you have." I stated that the paper had been investigating the building and loan associations, but that I knew nothing about the investigation further than that Mr. Fred Myrtle of the "Examiner" had been doing that work, and what information he had I was not aware of, except generally. He said to me, then—I asked him, I said: "What committee is it that you refer to?" He said: "The Committee on Commissions." So I said: "If you are going to the city on Saturday or Sunday, I will endeavor to make an appointment for Mr. Myrtle to meet you at the Palace Hotel, and he can talk this matter over with you." He said: "That will be too late; I want to go to work at this;" and he said: "Can't I see Mr. Myrtle before that?" So I then said to him: "Well, I will wire my office about it." While Senator French did not inform me he was the Chairman of the Committee on Commissions, yet I inferred from his

talk he was. It was ten days later before I learned who was the chairman of that committee. So I left Mr. French, and I sent a telegram to the "Examiner"—I have a copy of it here. I sent this telegram: "D. H. Robert, 'Examiner,'—Mr. Robert was the managing editor—"Senator French, Chairman Committee Commissions, wants take up Building and Loan Association. He says he was buncoed once. Wants to know if we can furnish him with information to work on. Would you think it well that Myrtle should see him?" In a further talk with French at that time—I had forgotten it—he told me that he was in the clutches of the Pacific Building and Loan Association for twelve years; that they had robbed him, and that it was not until he was elected to the Senate that he got out of their clutches. He said after he had been elected to the State Senate—I won't mention the name, because I am not sure—he said he went to the Pacific Company. He said he went to them, and he said: "Now I am a State Senator; I have been under your thumb for the last twelve years; you have robbed me, and now I am going up there and make trouble for you, and you must make a settlement with me—and they settled with me on that proposition."

MR. NICOL: Q. What was the name of that company he said he had been robbed by? A. Pacific.

MR. SIMPSON: Q. Was that a company against which he had some claim? A. I don't know. That was the name he mentioned, and I do not know that there is such a building and loan association as the Pacific, except I have seen in the paper, Pacific States. I don't know that there is any such company.

MR. McNAB: Q. Pacific Loan Company, is it not? A. I don't know, sir.

Q. Gunzberger? A. I think that that is the name he mentioned to me. I say I would not like to say the name, because I am not sure, but it is my impression that is the name he gave me.

MR. SIMPSON: Q. About when was that conversation with Senator French? A. On January 17th, about 1 o'clock in the afternoon.

Q. Do you remember whether you had any conversations with any of the other members of the committee— A. (Interrupting.) Before you interrupt me, may I go a little further than that?

Q. Yes, sir. A. I inferred at that time, from what Senator French said, that he was chairman of the committee, and so in my telegram I referred to him as the chairman. Ten days later, about Thursday or Friday, either the 25th or 26th—somewhere along there—of January, I learned for the first time that French was not chairman of that committee. I learned it in this way: I was standing on the curbstone in front of the Golden Eagle Hotel when Senator Bunkers crossed the street from the Capital. As he stepped towards the curbstone where I was standing he had a copy of the "Examiner" in his hand and he showed me a picture—it was one of the column pictures—and he said to me: "Murphy, why do you give French the credit of all this business?" I said: "How do you mean, Harry?" He says: "Look at this." I looked, and saw a picture of Senator French there, with this subhead: "Senator Frank French, Chairman of the Committee on Commissions and Retrenchments," and I said: "What is the matter with it?" "Why," he says: "French ain't the chairman of that committee; I am the chairman of that committee," and that is the first time I knew who was the chairman of that committee. Now I will go into my conversations with all the members of the committee if you desire that.

Q. Proceed. A. I never spoke to Senator Emmons or to Senator Wright in regard to the building and loan associations, nor to any member on the Committee of Commissions and Retrenchments on anything that was before them until the date—I do not remember the date—the day that Mr. Corbin was to appear before the committee. On that day, about 1 o'clock in the afternoon, I met Mr. Short at the Golden Eagle Hotel—one, or half after, I think half-past 1 o'clock, it was. He was one of the sergeants-at-arms who had gone to San Francisco to subpoena Mr. Corbin, and I said to him: "Is Mr. Corbin here?" I had looked at the registers in the hotels to see whether Corbin had arrived, and he said: "No; he had not. He promised to meet me here upon the arrival of the train, and go up to the committee rooms and testify, but," he said, "he is not here." That gave me the notion that Mr. Corbin had not put in an appearance, and was not going to put in an appearance. So I left the Golden Eagle Hotel and went up through the park to this particular number on Tenth street, which I do not remember now—817, I think it is—and right through the building I saw Senator Emmons coming along. Up to that time I had never spoken to Mr. Emmons about the matter at all in any shape, form, or manner. I met him about the steps going up into this building and had been waiting there for a few minutes, standing there waiting for some members of the committee to come along, and so I asked Emmons if the witness was going to be there, and he said he understood that he was not coming—that he had not come. I said: "Emmons, here is something I want to show you." We walked to the other side of the steps. At the half of the basement or lower part of the house are barred windows. I said to him: "What will you do with the witness if he does not appear here?" "Well," he said, "we will cite him for contempt;" and so I showed him these barred windows, and I says: "You are nicely fixed; you have got a place to put your witness in, if he is in contempt." And we talked for a minute or two, then, over the fact that I had been through this matter myself—I and two other "Examiner" men had been before the Senate on contempt and refused to answer questions, so I presume I knew something about the powers of the Senate. He went upstairs, and in a moment Wright came along, and I said to Wright: "Do you know whether Corbin is going to be here or not?" and he says: "I understand he is not;" and I think that is all the conversation I had with him. Now, that takes up three members of the committee. I will now go to Senator Rambo and to Senator Coggins. I never had any conversation with them whatever, except one evening later than the Corbin incident. My impression is it was the night when Corbin did not show up. I saw them in the rotunda of the Golden Eagle Hotel. I did not know Mr. Rambo; I was not personally acquainted with him; I knew him by sight. He was talking to Senator Coggins, and I said to Mr. Coggins: "Does your committee meet at night?" At that time our people were very much interested in this investigation. He said: "I don't know." He said to Senator Rambo: "Do you know?" and he said "No," and then they said something about "Where are you going this evening?" and I saw in the direction of the swinging doors in the barroom, between the rotunda and where the barroom is—I saw Senator Wright in there, and I said to Wright: "Are you going to meet to-night, your committee," and he said: "Yes." I returned then and turned to tell Senator Rambo and Senator Coggins

that there was going to be a meeting, and I think Coggins said to Rambo, or Rambo said to Coggins: "All right; we won't go to the theater; we will go up to the committee." Now, there is one more member I forgot, and that is Senator Bauer. I never spoke to Senator Bauer about the committee or its meetings, or anything of that sort until along late in these proceedings. My impression is it was last Sunday—no, it was last Friday; in going down on the ferry, across in the Solano, there was a general discussion about the law, and so forth, and I also chipped in—I do not know just about what it was. I think now I have gone over fully the discussions I had with any of the Senators concerning that matter, except this: I did for some days, probably three or four days, after I had my first talk with French on the 17th of January—I did not then inquire or know who were the members of the committee, because I had nothing to do with building and loan associations so far as the "Examiner" was concerned. It was not any of my affair, as the individual reporter on the paper, because Mr. Myrtle was attending to that. I think I forgot to say this: In answer to my telegram to Mr. Robert at that time, Mr. Myrtle came to Sacramento, and I saw him talking to Senator French. I was not present at the conversation; I know nothing about it. Mr. Myrtle is here and can tell what conversation he had about it. May I go on?

MR. SIMPSON: Proceed. A. After Mr. Myrtle's return to San Francisco, he sent me a telegram which was signed by himself, and then there was a line attached to it by Mr. Barrett, who was the news editor, to please look this up. The telegram from Mr. Myrtle was to ask Senator French to have Corbin subpoenaed. There was a second telegram came to me to have Corbin subpoenaed before the committee. This was after Mr. Myrtle had been here, had seen Senator French, and had gone to San Francisco.

THE CHAIRMAN: Q. I understand this telegram came from the "Examiner" office? A. Yes, sir.

Q. To you? A. To me here.

Q. To Mr. Myrtle? A. No; after Mr. Myrtle had gone to San Francisco; it was from Mr. Myrtle, and then an addenda from Mr. Barrett, our news editor, saying please to attend to this matter that Mr. Myrtle had suggested in his telegram.

THE CHAIRMAN: Q. Requesting you to have Corbin subpoenaed? A. No, not requesting me; but for me to see French and have Corbin subpoenaed before the committee.

Q. All right. A. I received another telegram from the office, I do not remember the date, but probably a day or two afterwards, in which the suggestion was made to me, and I think it was signed by Mr. Barrett, the news editor, and they said to me to suggest, something to that effect, to Senator French—this must have been somewhere about the 22d of the month, in which Mr. Barrett said to me or wired to me, and I am pretty sure it came from Barrett—a suggestion that I see Senator French and ask Senator French to have Stuart, the auditor of the Continental Building and Loan Association, subpoenaed, and a man named Dorsey, whose initial now I do not know, sir.

MR. SIMPSON: Q. Did you do that? A. I did, sir. I went to Senator French and showed him the telegram.

Q. And subpoenas issued on that? A. I don't know that, sir.

Q. You heard that they did? A. I never have heard. I saw Mr. Stuart here. Mr. Stuart came here and I met him and he told me he had been subpoenaed. Mr. Dorsey, I have never seen him, and do not know that he has been here yet.

Q. Of course you know Joseph Jordan? A. Yes, sir.

Q. Did you ever have any talk about your attitude, or the attitude of the "Examiner," towards this committee? A. Never.

THE CHAIRMAN: Q. Or towards the Continental Building and Loan Association? A. No, sir.

MR. SIMPSON: I do not care to ask this witness any more questions myself.

THE CHAIRMAN: I have none.

THE WITNESS: May I—just a moment?

MR. SIMPSON: Yes, sir.

A. On one evening I was standing with Mr. Hamilton in front of the Golden Eagle Hotel and a man came up to us whom both of us knew, Mr. Tichenor, who is a detective, and we saw him, and both of us shook hands with and spoke to him, and either Mr. Hamilton or myself—I think I said to him, knowing his business and that he was a private detective, and knowing that he would not be up here unless he was up here on something that would be interesting to a newspaper in some way—I says: "What are you doing here?" He smiled and says: "I am up here on a little lawsuit business." I speak of that for this reason: I notice in Mr. Jordan's testimony last night that Mr. Tichenor said he did not want to come up the street, because Al. Murphy might see him. I can understand his caution about that; I might ask Tichenor: "What are you doing here?" and then all this explosion would not have happened. I want to make one offer now, may it please the committee: I will go with the chairman of this committee, or any member of this committee, to the telegraph office, and permit, or rather see that the chairman sees, or any member of the committee sees every telegram sent from here to the "Examiner" on any business, whether it was personal, whether it is from me to my wife or anybody—any telegram sent by Mr. Hamilton or by anybody on the "Examiner" staff from here, and if they desire every telegram on this matter that has been sent from San Francisco during this session of the Legislature, they can have them. I make that offer and stand to make it good—whether it is a personal telegram or anything else. I do not mean to say that I would want to have all brought up here, because there may be something personal; but I am willing for them to witness any telegram, whether sent by Mr. Hamilton, Mr. Barrett, or myself to the Senators or San Francisco. We have had nothing to do with that. There is no job and no conspiracy, and I think you will agree, Mr. McNab, that that is true.

MR. McNAB: Q. You want me to agree to what? A. I want you to agree that there has been no agent here, and that we have done nothing dishonorable.

Q. Of course I accept Mr. Murphy's statement. I am simply here to present this matter in support of our affidavit, and I think these telegrams that Mr. Murphy has testified to are somewhat stronger than the evidence, and I would like to have the telegrams put in evidence. A. Those telegrams were sent after the evidence was introduced here, and they are at the service of the committee at any time.

Q. Hardly. You know that Mr. Barrett telegraphed you: "Have

French subpoena Mr. Corbin?" He certainly didn't ask you to subpoena Mr. Corbin after this affidavit was read? A. I am willing to be corrected in that matter.

Q. You admit that? A. I admit that is true. That does not change my offer.

Q. The telegram that was sent by Mr. Barrett to have the committee subpoena Mr. Stuart, that was sent before the explosion? A. I am not sure of that, because I do not remember the date.

Q. They certainly did not ask for Mr. Stuart after—— A. I think that is right. I think that telegram was sent prior to the explosion, as you call it.

Q. How about the telegram to have Dorsey subpoenaed; that was before the affidavit? A. I can not tell the date, but I think you are right about that.

Q. After the reading by Mr. Nicol before the Senate of this State of the affidavit of Mr. Corbin, did Mr. Barrett send you any more telegrams to get subpoenas from Mr. French for people connected with the Continental? A. I would say that you are right about that.

Q. You have no objection to bringing these various telegrams you have testified to and making them a record of this committee in regard to that matter? A. I want to go into that. The telegraph office informs me that I am at liberty to make a copy of those telegrams that are there.

Q. Well just the telegrams that you have alluded to. I am sure you would not misrepresent these telegrams to the committee. These telegrams will be expected by the committee.

THE CHAIRMAN: He is under oath, and his written deposition with the committee will be just as good as oral.

THE WITNESS: There may be a telegram or two that I have forgotten, and the chairman of this committee or any member of the committee can go with me and go through any telegram that is there referring to this matter.

THE CHAIRMAN: I am willing to do that if the committee so instructs me.

MR. McNAB: Q. You have been acquainted with the gentlemen of this committee for a good many years? A. With the exception of Senator Simpson, yes, sir. Some of them are my very strong personal friends.

Q. All of the four?

MR. RALSTON: Are you talking about this committee?

MR. McNAB: No; we are not investigating this committee.

THE WITNESS: I did not understand you.

Q. I mean the committee under investigation—under discussion. Your acquaintanceship with Senator French, Senator Bunkers, and Senator Wright has extended over a number of years, has it not? A. No; I never knew Senator Emmons until I met him six years ago, when he was a member of the Assembly. I never knew Senator Bunkers until he was elected two years ago. I never knew Mr. Wright, I think, until four years ago when he was a member of the Assembly.

Q. Your relations with Mr. Wright when he was a member of the Assembly four years ago were quite close? A. Yes, sir.

Q. Was he not a member of the "Examiner" committee which was appointed to go to San Francisco and harass Mr. Phelan's administration? A. No, he was not sent there to harass Phelan's administration.

He was sent to find out whether there was graft in Chinatown, and whether Mr. Wittman was taking money. There were no charges filed. The only charge against Mr. Phelan was that he was keeping in office there a man whom he believed to be corrupt, and whom your friends to-day think is corrupt.

Q. I don't allow the "Examiner" to state what I think.

THE CHAIRMAN: I think this examination is a little foreign.

MR. McNAB: I did not want it incorporated in the record for the "Examiner" to state what I think.

THE WITNESS: I withdraw that.

MR. McNAB: Q. When were you acquainted with the resolution passed by the Senate extending the powers to this Committee on Commissions and Retrenchment? A. I don't think I was ever acquainted.

Q. Did you have any talk with Mr. Hamilton about that? A. I think not—not until possibly after this investigation was on. We generally discuss those things down in our headquarters, and it may be possible I talked with Mr. Hamilton about it.

Q. Did you see that resolution extending its powers before it was introduced? A. No, I did not.

Q. Do you know whether Mr. Hamilton saw that resolution before it was introduced extending their powers? A. I do not.

Q. Do you know whether any member of the "Examiner" saw that resolution before it was introduced, and approved it? A. I do not know of anybody who saw that resolution except it might possibly be Mr. Paul Tarpey, who has been reporting the proceedings of the Senate. When it was introduced he might have seen it, and I have a recollection generally of knowing there was such a resolution introduced here. I want to say this: I look over the "Bee"—we have six or seven men—I look over the "Bee" at night and look over the proceedings in the papers in the morning to see if there is anything we have missed—if there is anything we have lost, and any story we did not get—and possibly I did something of that kind.

Q. I am not speaking of after it was introduced, but I am speaking of before it was introduced. You would not see it in the "Bee" before it was introduced? A. No, sir.

Q. You informed me that after the arrival of Mr. Myrtle here he took charge of the building and loan controversy in Sacramento for the "Examiner;" is that right? A. No, sir; I did not say that. I said Mr. Myrtle had that matter in charge. You asked me after the arrival of Mr. Myrtle did he take charge; there was nobody in charge—

Q. (Interrupting.) I understood you to say that from these telegrams Mr. Myrtle was sent here. A. I sent the telegram to Mr. Robert and I received no answer from him, and the next I knew Mr. Myrtle was here.

Q. Did you introduce Mr. Myrtle to Mr. French? A. I did not.

Q. You do not know how Mr. Myrtle became acquainted with Mr. French? A. No. He used to be out in Godchaux's office in the New City Hall, and Mr. French was a deputy county clerk, and Mr. Myrtle was a newspaper reporter for years.

Q. So when Mr. Myrtle arrived in Sacramento from Mr. Robert in this matter, he knew where to find French himself, without your assistance? A. I did not know where French lived. My recollection is that I was standing talking to Myrtle after he arrived, and French came

down the street and he left me and went off and talked to him. What they said at their meeting I do not know.

Q. Do you know, Mr. Murphy, of your own knowledge, who furnished the committee the names and details contained in this subpoena to the Continental Building and Loan Association, including the various books and papers? A. I do not.

Q. You do not know whether Mr. Myrtle furnished it? A. I do not. Mr. Myrtle is here, and if he furnished them he will say so.

Q. Do you know whether Mr. Palethorp came to Sacramento in this matter? A. No, I do not. I never knew Mr. Palethorp—never met him except once prior to his arrival in Sacramento. One day I was going down Montgomery street—one afternoon or about noon—and I met Mr. Myrtle, and I was going up on Bush street to Norman's to get some lunch, and I asked Mr. Myrtle to come with me, and he asked me to come up with him to the Mills Building, and I found, then, that he was going to the Hassell Audit Company. At that time I did not know that the Hassell Audit Company was experting the books of the Continental Building and Loan Association, or anything of that sort, and I went up there and he introduced me to Mr. Palethorp. It was not any of my business, particularly. I came down and met you, and you know what you said.

Q. You knew that Mr. Palethorp was working for the "Examiner," before the meeting of the Legislature, on Continental matters? A. Yes, sir.

Q. And you know that Palethorp had appeared here to aid the Committee on Commissions and Retrenchment? A. There is a question about that. It is a question who has come here to aid the committee. I did not know that he was even subpoenaed.

Q. You knew it appeared in the "Examiner" that he was subpoenaed to appear before the committee? A. My dear Mr. McNab, I do not read all the "Examiner."

Q. You do not read all that is in the "Examiner?" A. No.

Q. Did you know one John Stratman, of Berkeley, that appeared here? A. I know him ever since he has been a boy.

Q. Your knowledge, then, of Mr. Stratman must be almost as long as that of Senator French, who states, in introducing him as a witness, that he had known him forty years. Do you know who paid for the appearance of Mr. Stratman? He was not subpoenaed, so far as you know? A. I do not know whether he was or not. I did not know that Stratman was here. My first information of the matter was that Jack Stratman was up here and had an awful story to tell about the Continental Building and Loan Association, or some association, and I sent one of our reporters to find him.

Q. Had that awful story ever been published in the "Examiner" before to your knowledge, and you yourself had nothing to do with bringing down Stratman, the man with the awful story, to Sacramento, to the committee? A. I saw him; I never spoke to him.

Q. You do not know whether the "Examiner" paid his expenses or not? A. I do not. I know I did not.

MR. McNAB: That is all.

THE CHAIRMAN: Q. Now, Mr. Murphy, did you try to influence in any way the appointment of the Committee on Commissions and

Retrenchment? A. I never had any conversation with—I suppose you mean with the man who had the appointing power?

Q. Yes; with the Lieutenant-Governor. A. I never had any conversation with Lieutenant-Governor Anderson in regard to the committees, except general conversation that newspaper men always have with the Speaker of the House and the Lieutenant-Governor. It is supposed to be a fairly good piece of news to find out who is going to be chairman of the Judiciary Committee and chairman of the Finance Committee, and all that sort of thing, and on two or three occasions when I have met Lieutenant-Governor Anderson I have said: "Got any news about those committees you think you can give out?" And I think the night before the committees were appointed I went to Lieutenant-Governor Anderson, in his room in the Capital Hotel, and I asked him if he was ready and willing to give out the names of the chairmen of some of the committees—that is, Finance and others—and he said: "No; the other boys have been around to see me about it, Al, and I have not given it out and do not want to until to-morrow;" and so I said: "All right." I have never suggested to Speaker Prescott or to Lieutenant-Governor Anderson the name of any man on any committee. I want to say this, if you will permit me to: That had the building and loan association matter been going to come up here, and had the "Examiner" said to me: "We are going to bring this building and loan association to appear before the Senate, and I want you to go and see the Lieutenant-Governor about the matter, I would have had no hesitancy in going to him and telling him: "We are going to bring this matter up and we want the committee to do what is right"—would not have hesitated a moment, and do not think there would have been anything wrong about it. I do not suppose there is a single member of this committee that has not suggested to Lieutenant-Governor Anderson what committee he wanted to go on.

MR. McNAB: Q. If you were suggesting to Lieutenant-Governor Anderson the names of members of the committee to investigate the building and loan associations, would you have suggested Senator Wright, Senator Emmons, Senator Bunkers, or Senator French? A. I would not.

MR. McNAB: That is all.

THE CHAIRMAN: That is all. I understand you to say that if the committee desires one of their members to go with you and look over the telegrams, that you have no objection to doing that, and that you will have them offered in evidence here. A. I beg your pardon, sir. I have not said that I could get the originals to offer here. I say if a member of the committee will accompany me to the telegraph office, he can go over any telegram that has been sent on any matter by any of the "Examiner" staff here to the city, and then they can pick out any telegram there that they desire to use here, and I am at your orders at any time on that.

THE CHAIRMAN: This telegram you have presented to the committee to-night, do you desire to offer it in evidence?

MR. SIMPSON: The witness has read its contents and the stenographer has taken it down.

MR. NICOL: We would like to have all these telegrams to which Mr. Murphy referred in regard to the subpoenaing of witnesses to appear before the Committee on Commissions and Retrenchment.

THE WITNESS: There are probably some others over there that I may have overlooked.

MR. NICOL: All of them. Is that suggestion agreeable?

THE CHAIRMAN: To-morrow morning between half-past 8 o'clock and 9; would that do?

THE WITNESS: I do not get through work until 3 or 4 o'clock in the morning, and I would like to have you set it for in the afternoon.

THE CHAIRMAN: I am pretty busy in the afternoon, too.

THE WITNESS: I would have to stay up all night to meet you.

THE CHAIRMAN: Probably we can fix some other time.

THE WITNESS: I will be down at the hotel to-night.

THE CHAIRMAN: All right.

MR. NICOL: I understand it is agreeable to Mr. Murphy to have the stenographer take copies of them and put them in the record.

THE CHAIRMAN: If the committee so desires.

MR. McNAB: These you are testifying to are presumed to be among those.

THE CHAIRMAN: We will get those that have been testified to, surely.

TESTIMONY OF F. E. MYRTLE.

Sworn.

THE CHAIRMAN: Q. Mr. Myrtle, you are a reporter on the "Examiner?" A. Yes, sir.

Q. You have listened to the testimony of Mr. Murphy, that portion of it in which he says you sent a telegram from the city to him requesting him to see Senator French and have Mr. Corbin subpœnaed? A. No; Mr. Stuart—not Mr. Corbin.

Q. Mr. Stuart? A. Yes, sir.

Q. Will you state to the committee your reasons for sending that telegram and your desire for having Mr. Stuart subpœnaed? A. Mr. Palethorp of the Hassell Audit Company had investigated the books of the Continental Association. When the account of the defalcations in the Continental was written up in the "Examiner," Mr. Palethorp's work was referred to. Mr. Palethorp was the expert accountant who had investigated the books, made an investigation of the books of the Continental, and his work was referred to in the "Examiner's" articles. Mr. Palethorp was engaged by French, I do not know whether by reference of the committee to Mr. French—Senator French—but Palethorp came to me one day and said that he had been engaged, and I said: "Well, all right; it is up to you and the Hassell Audit Company—if you have gone to the committee, all right; I do not suppose there is any objection." So he made some terms, I think, because they thought in investigating building and loan associations, they might not be sufficiently conversant with the methods of building and loan associations to examine the witnesses, I presume. So Palethorp came to me one day and said: "I would like to have the auditor of the Continental up there and I do not know French very well." He said: "Where can I find him?" So I said: "If you want him, I will telegraph for you, if you like," and so I sent the telegram to Al Murphy to tell Mr. French that Palethorp thought it would be a good idea to subpœna the auditor of the company. I believe I remarked that I concurred in the proposition.

Q. Had you had any conversation about the investigation of any of these building and loan associations with Senator French? A. Yes, sir.

Q. Will you state the conversation you had with him? A. Yes, sir. One day on Tuesday about three weeks ago, I remember it was Tuesday, I was called into the managing editor's office of the "Examiner" and the managing editor handed me a telegram from Murphy, and I saw that French was on some committee—the name of it I did not observe at the time, but it was, of course, this Committee on Commissions and Retrenchment—and it declared that he had been buncoed by some building and loan association and was going to investigate it, and the telegram suggested that I should talk to French. So I said: "Well, what do you want me to do?" The managing editor says: "I do not know the committee. What is this committee?" I said: "I do not know. I never heard of it." "Well," he says, "You can go up there and see French and see what he wants to do and how he is going to go about it, and we will publish the news of whatever he tells you, and use your own judgment." So I went up to Sacramento that very night, and the following day I hunted up French and I found him here in this Chamber, and I called him out and we walked around the Capitol grounds, and I said: "French, what is this investigation you propose to undertake of the building and loan association?" He says: "I have been buncoed by them, and my friends have been buncoed, and I am hot, and I am going after them." "Yes, very well; what do you want me to do?" "Well," he said, "I am told you have certain information about them. There have been some articles published in the paper already, and you have certain information. I would like to know if you are going to get behind us in this inquiry." "Well," I said, "what do you mean by getting behind you?" "Well," he said, "I don't know. They say the company, the Continental, advertises; we don't know whether we will get a paper to support us; but we would like to have the 'Examiner,' if it feels that way." "Well," I says, "French, I will tell you if you mean business and you really mean to investigate the building and loan associations in a proper manner, and need me to go into the question, then I think we will support you in what you are doing, because we think it will be a good work, but we will only get behind you if you are really using business"—I do not know the exact words I used, but I wanted to be sure that there was no monkey-work; that there was a real, genuine investigation, and then we would give the investigation our moral support. He said: "What do you know?" I says: "I have certain information about one of these building and loan associations that I am going to let the public have in a day or two—very shortly now." I said: "We have just concluded an investigation of the Continental Building and Loan Association on some matters you have called to our notice." He says: "What is it that you know?" I says: "I cannot tell you the particulars, because the first information about this is going to be given to the readers of the 'Examiner'—not to you or any committee—but when we publish this you may take it for granted that if we publish it, it is true, and if you want to act upon it, you can and we will support you in an honest investigation of this proposition." He said: "Will you give me an idea of what the information you have?" "Yes; I will tell you this much: We know of defalcations to a large amount that have been covered up by directors within the last two or three years. Now, that is all I want to tell you,

because I do not want—I want the ‘Examiner’ to have the news of this story, and that is all there is to it.” Then he told me of a resolution having been put through some evenings previously—a week before that, I think it was—in which the committee had been given extraordinary powers; and I said: “Yes; have you not got those powers *ex-officio*?” He says: “Well, we want the main body to confirm us in our powers. That is what we meant by the resolution we put through.” I said, “Oh, yes;” I said: “What are you going to do?” He said he was going to call witnesses and have an investigation. He talked about some diamond contract companies, bond companies, and other concerns that he classed as get-rich-quick concerns. So he then said that there was to be a meeting of the committee that night, and would I attend and tell them what I knew, and I said no, I would not. There was a little more about it. That is about all I had to say.

Q. Did you talk with any of the other four accused Senators about this matter? A. No, sir.

Q. At any time? A. No. I do not know Senator Wright now. I suppose I know Senator Bunkers. I think I said: “How do you do?” to him when I saw him the other day when I came up to the contempt proceedings. What is the name of the others?

Q. Senator Emmons. A. I do not think that I ever talked to Emmons until the other day when he came up while the contempt proceedings were going on and said—asked me if I did not think he was right to remain away, or something—that he did not want to be here while those charges were hanging over his head. French is the only member of the committee with whom I had any talk or communication of any kind whatsoever regarding this or any matter of the kind.

THE CHAIRMAN: Does any member of the committee desire to ask any further question?

MR. RALSTON: No.

MR. SIMPSON: Not for me.

MR. McNAB: May I ask some questions?

THE CHAIRMAN: Proceed. Yes, sir.

MR. McNAB: Q. You have testified that Mr. Palethorp spoke to you about being employed by Senator French? A. Yes, sir.

Q. At what time was that? A. I will tell you: It was some three or four days after I had that conversation with Senator French that I have referred to. I could not say the exact day, but some few days.

Q. Some three or four days? A. After.

Q. After Mr. Robert sent you up here? A. Yes, sir. I was up here two nights and a day or one night and a day. I came up on Tuesday night on a very late train—Oregon express. I got back on Thursday, and this was some three or four days after—the exact day of the week I cannot tell you.

Q. This was some few days after the passage of the resolution conferring plenary powers on this committee, was it not? A. No; not that I remember. I remember the resolution conferring plenary powers was passed, and I think the records will show it was about a full week before I came to Sacramento, because it was referred.

Q. Before you saw Senator French? A. Yes, sir.

Q. After he had these powers, as he supposed? A. Yes, sir.

Q. That is, the committee supposed? A. Yes, sir.

Q. And you supposed after the bringing here of all the witnesses and all the papers and all the books—— A. (Interrupting.) Yes, sir.

Q. —that you had the interview with Senator French? A. Yes, sir; about a week afterwards, I should judge.

Q. And how long after that before you had this conversation with Mr. Palethorp? A. Three or four days afterwards.

Q. Mr. Palethorp was the so-called expert of the Hassell Audit Company, was he not? A. He was.

Q. And the "Examiner" had, for some weeks before this Legislature assembled, employed the Hassell Audit Company, or through the Hassell Audit Company had employed Mr. Palethorp, to expert the books of the Continental, had it not? A. That is true.

Q. And Mr. Palethorp and you met in discussion every day, or practically every day? A. That is true.

Q. Did Mr. Palethorp tell you that Mr. French wanted to employ him? A. Yes, sir; I think so. Yes, sir; I think so.

Q. Do you know how Mr. French came to know that Mr. Palethorp was the man to be employed? A. Well, I will tell you how I suppose he knew——

Q. (Interrupting.) I would rather, if you know how he knew, to take that, than your supposition. A. I really don't know; I can say——

Q. (Interrupting.) I can guess myself. A. I do not think I actually know how he came to be employed, but I do know this: That I went back to Sacramento on Thursday, I think; anyhow, I think it was a Thursday night, or the same night that I saw Senator French, that the first article appeared in the "Examiner" about the defalcations of the Continental Building and Loan Association.

Q. And it was after that that Palethorp came to you and said that Senator French wanted to employ him for the committee, was it? A. It was; yes, sir—some two or three days after that.

Q. Had you dismissed him from the employment of the "Examiner" at that time? A. To all intents and purposes.

Q. Does "all intents and purposes" mean discontinuance of salary? A. Yes, sir; he worked on per diem.

Q. Then your per diems quit before French's per diems commenced? A. I think that is probably so.

Q. Did he ask you—— A. (Interrupting.) One moment. We did not publish in the "Examiner" one line about the Continental until we had what we thought was all the information we required. Therefore it follows that Mr. Palethorp's services must have terminated prior to the publication of the first article.

Q. You do not really know whether Mr. Palethorp's remuneration from the "Examiner" ceased when Senator French's remuneration to him commenced; they did not go on simultaneously? A. I don't think so.

Q. Did Mr. Palethorp inquire from you how Senator French was going to pay him, or did he inquire as to whether there was any doubt about his getting his money if Senator French employed him? A. No, I think it was put in this way; Mr. Palethorp said: "They will have to pay me for my services, of course."

Q. That is the Legislature—or the "Examiner" advanced it, and the Legislature would reimburse? A. Oh, no; the committee.

Q. The committee would have to pay it? A. Yes, sir.

Q. Did Mr. Palethorp have any thought as to where the funds would come from for the payment of this? A. I don't think so.

Q. Did Mr. Palethorp tell you that this committee had all the clerks that the Legislature allowed in the form of Miss Bunkers and somebody else? A. No, sir.

Q. He did not express any indication to you as to where his pay was coming from? A. No; except as I told you, he told me that they would have to pay him for his services, that they wanted to engaged him, and supposed they would have to pay him.

Q. Did you ask him then if he was off the pay-roll of the "Examiner" at the time he talked of taking employment from French? A. Did I ask him that question?

Q. Yes. A. No.

Q. So you do not know as a fact of your own knowledge that he was off the pay of the "Examiner" when he was on the pay of French? A. No; but I think that is a very easy matter to find out.

Q. You have not found it out up to this time? A. Yes, sir; I have answered your question. You say I do not know of my own knowledge. I do not know of any cash transaction between the "Examiner" and Mr. Palethorp after that day.

MR. SIMPSON: Q. Do you know whether Palethorp was hired by French or not? A. I believe so.

MR. McNAB: Q. If he was not off the pay of the "Examiner," do you know why he should ask you whether he could take employment from French? A. He did not ask my permission.

Q. He just simply consulted with you? A. Yes, sir.

Q. He had been then six weeks in the employ of the "Examiner"? A. He had been in all a number of weeks; yes, sir.

Q. And he came to you at that particular date to see whether he should enter the employment of Senator French? A. Yes, sir.

MR. McNAB: I think that is all.

THE CHAIRMAN: Q. Do you know how Senator French came to employ Mr. Palethorp as expert for the committee; I presume he was employed? A. Yes. I think that he read the articles in the "Examiner" in which Mr. Palethorp's name was mentioned.

Q. Do you know, then, whether Senator French communicated with Mr. Palethorp? A. Yes, sir; I do know that.

Q. He did communicate with him? A. Yes, sir.

Q. And asked him to act as expert for the committee? A. Yes, sir; he did that.

Q. Do you know whether there was any agreement as to compensation on the part of Senator French on behalf of the committee? A. No, but I think French told Palethorp that he was going to pay him.

MR. RALSTON: Q. How much? A. I do not know how much.

THE CHAIRMAN: Q. Do you know whether the hiring— A. (Interrupting). I may say this, that Mr. Palethorp remarked that he would be perfectly willing to take the employment of the committee, as he wanted to go through with this thing as it had gone so far.

Q. Do you know whether the Committee on Commissions and Retrenchment authorized Senator French— A. (Interrupting.) No; I do not know that at all.

Q. —to hire him? A. No, sir; I know nothing about the Com-

mittee on Commissions and Retrenchment, because I went out of Sacramento after making these arrangements.

Q. Did Senator French say he was authorized to hire him, or that he did it on his own hook? A. No; he did not tell me; I supposed he was clothed with full power by the committee.

MR. McNAB: Q. Among the other powers that were passed by this ordinance? A. As I say, I had nothing to do with French beyond that little agreement—conversation with him.

THE CHAIRMAN: Q. You had no other conversation with Senator French relative to the matter? A. Yes, sir; I had.

Q. What other conversation did you have—what was that? A. I do not remember the terms of it, but we met casually—

Q. (Interrupting.) In substance? A. Merely that he was going ahead and going to investigate the Continental.

Q. That was some time after the first conversation—how long after? A. I do not know; a few days.

MR. RALSTON: Q. Did you suggest to Senator French to employ Mr. Palethorp? A. I did not. He suggested that he wanted to employ him.

THE CHAIRMAN: Do you want Mr. Hamilton?

MR. McNAB: Yes, sir. I have been informed that Mr. Hamilton has some information. I can ask him now.

TESTIMONY OF EDWARD H. HAMILTON.

Sworn.

MR. McNAB: Q. Mr. Hamilton, have you any knowledge of the resolution adopted by this Senate giving plenary powers to the Committee on Commissions and Retrenchment on January 10, 1905, before it was adopted? A. No; neither before nor after. I have not read it to this day.

THE CHAIRMAN: Q. Did you, Mr. Hamilton, ever suggest to the Lieutenant-Governor how he should make up this Committee on Commissions and Retrenchment? A. Never spoke a word to him on the subject.

THE CHAIRMAN: Mr. Cator, have you any witnesses that you would like to—

MR. CATOR (Interrupting): I have been requested by Senator Emmons to hand the committee a certified copy of summons and complaint in the Superior Court of the County of Kern. It simply makes definite what the nature of the cause of action was of Margueritte J. Emmons et al. against the Continental Building and Loan Association and others. It has been testified to by Mr. Corbin orally before this committee in regard to it. I will offer the certified copy, and at a later day, in the argument of the matter, I may desire to show what the animus of this is. We are not only crucified here between two newspapers in a fight and political matters, but also that litigation which arose, and this is an attempt to undermine these gentlemen.

MR. McNAB: The crucifixion occurred between two, and there are three others in this case.

(The paper was marked "Exhibit 'G'—J. A. Vaughan, Reporter," and is as follows:

IN THE SUPERIOR COURT OF THE COUNTY OF KERN, STATE OF CALIFORNIA.

MARGUERITTE J. EMMONS and E. J. EMMONS (her husband), *Plaintiffs*,

vs.

DAVID W. LORING, C. F. RILLIET, W. BROOKS JONES, and CONTINENTAL BUILDING AND LOAN ASSOCIATION (a corporation), *Defendants*.

Plaintiffs complain and allege:

I.

That at all of the times hereinafter mentioned, the plaintiffs were and now are husband and wife.

II.

That at all of the times hereinafter named, defendant Continental Building and Loan Association was and now is a corporation duly organized and existing, and doing business as such corporation in the County of Kern, State of California.

III.

That on the 19th day of October, 1901, plaintiff, Margueritte J. Emmons was the owner of the following described real property situate in the City of Bakersfield, County of Kern, State of California, to wit:

Commencing at a point on the west line of "D" street, sixty-one (61) feet north of the southeast corner of Block 423A, in the town (now city) of Bakersfield, according to the map of said city filed in the office of the County Recorder of the County of Kern, November 25, 1898, and running thence north and along the west line of said "D" street, sixty-one feet to the alley in said Block 423A; thence west at a right angle eighty-two feet along the south line of said alley to the northwest corner of lot eighteen (18) in said block; thence at a right angle south and along the west line of said lot eighteen (18) sixty-one (61) feet to the place of beginning. Being the north sixty-one (61) feet of lots eighteen (18), nineteen (19), and twenty (20), in said Block 423A.

IV.

That on the 19th day of October, 1902, these plaintiffs made, executed and delivered to defendants, David W. Loring and C. F. Rilliet, a Deed of Trust in and to the said described premises as more particularly set forth in a copy of said Deed of Trust attached hereto, marked Exhibit "A," and made a part and parcel of this complaint, and that said Deed of Trust was filed for record in the office of the County Recorder of the said County of Kern, and was duly recorded in said office in book 129 of Trust Deeds, at page 11 thereof.

V.

That these plaintiffs, or either of them, never at any time received any sum of money whatever, mentioned in the said Deed of Trust, as the consideration thereof, but on the contrary, all sums mentioned in said Trust Deed were retained in the possession of the Continental Building and Loan Association, a corporation, defendant herein.

VI.

That these plaintiffs, or either of them, never at any time by any authority whatever, authorized the said Continental Building and Loan Association to retain possession of said moneys, nor any part thereof, and that these plaintiffs nor either of them never at any time authorized the said Continental Building and Loan Association to dispose of, the said moneys or any part thereof.

VII.

That as these plaintiffs are informed and believe, and so allege the fact to be, that the said Continental Building and Loan Association have paid out large sums of said money mentioned in said Deed of Trust to divers persons, without the consent or authority of these plaintiffs, and for purposes contrary to the provisions of the said Trust, and for purposes not beneficial to these plaintiffs, and for purposes not beneficial to the premises described in said Deed of Trust, but that these plaintiffs are ignorant of the true amounts so paid.

VIII.

That W. Brooks Jones, at all of the times in this complaint named, was the agent and acting as the agent of the said Continental Building and Loan Association, and of David W Loring and C. F. Rilliet, defendants herein, and as such agents had possession of the said moneys named in said Trust Deed and disposed of the said moneys as hereinbefore set forth.

And for a further and second cause of action, these plaintiffs allege:

I.

That at all of the times hereinafter mentioned, the plaintiffs were and now are husband and wife.

II.

That at all of the times hereinafter named, defendant, Continental Building and Loan Association, was and is a corporation duly organized and existing and doing business as such corporation in the County of Kern, State of California.

III.

That on the 19th day of October, 1901, the plaintiffs herein made, executed, and delivered a trust deed to David W. Loring and C. F. Rilliet, conveying the property mentioned and described in said Trust Deed for the purposes mentioned therein, and that at the time of so making, executing and delivering the said Trust Deed, plaintiff, Margueritte J. Emmons, was the owner of the said described premises.

IV.

That the moneys mentioned in the said Trust Deed, and to secure the repayment of which the said Trust Deed was given, has never been paid to these plaintiffs or either of them, nor has any part of the said moneys been paid to these plaintiffs, or either of them, but on the contrary the said moneys and the whole thereof has been retained by the Continental Building and Loan Association, defendant herein, and has by the said Continental Building and Loan Association through its agent, W. Brooks Jones, been paid to divers persons, and for purposes contrary to the provisions and conditions of the said trust, and that these plaintiffs, nor either of them, have never authorized or consented to such payments by the said Continental Building and Loan Association, nor by its agent, W. Brooks Jones.

V.

That notwithstanding that the conditions of the said trust have not been complied with upon the part of the Trustees, defendant herein, nor upon the part of the Continental Building and Loan Association, these plaintiffs are informed and believe, and so allege the fact to be, that the said David W. Loring and C. F. Rilliet, trustees, and the Continental Building and Loan Association are about to advertise the said premises described in the said Trust Deed for sale, under the provisions for sale contained in said Trust Deed, and are about to sell the said premises and will sell the said premises unless restrained by an order of this Court, and these plaintiffs will be without any remedy in case said sale is permitted.

VI.

That these plaintiffs have no plain, speedy or adequate remedy at law.

WHEREFORE, plaintiffs pray judgment of this honorable Court:

First—That David W. Loring and C. F. Rilliet, Trustees, and the Continental Building and Loan Association the beneficiary of said trust, render an accounting of all moneys expended, and that have come into their hand as set out in this complaint.

Second—That the said David W. Loring and C. F. Rilliet, Trustees, and the Continental Building and Loan Association, the beneficiary of said trust, be restrained from selling or disposing of the premises described in said trust until such time as the conditions of the said trust in regard to the payment of moneys have been fully complied with, and these plaintiffs have made default.

Third—For costs of this action.

Fourth—For general relief.

EMMONS & EMMONS,
Attorneys for Plaintiffs.

STATE OF CALIFORNIA, }
COUNTY OF KERN, } ss.

E. J. Emmons, being first duly sworn, says: That he is one of the plaintiffs named in the above and foregoing complaint. That he has read the said complaint, and knows the contents thereof, and that the same is true of his own knowledge, except as to those matters therein stated on information and belief, and that as to those matters he believes it to be true.

(Signed:) E. J. EMMONS.

Subscribed and sworn to before me, this 23d day of April, 1902.

[SEAL.]

RONALD McDONALD.

EXHIBIT "A."

This Deed of Trust, made and executed this fifteenth day of October, A. D. one thousand nine hundred and one (1901).

WITNESSETH: That for the consideration hereinafter mentioned, Margueritte J. Emmons and E. J. Emmons (her husband) of the City of Bakersfield, County of Kern, State of California, grantors, do hereby grant, bargain, sell, convey and confirm unto David W. Loring and C. F. Rilliet and to the survivor of them, their successors and assigns, that real property, with the improvements thereon, situated in the City of Bakersfield, County of Kern, State of California, described as follows, to wit: Commencing at a point on the west line of "D" street, sixty-one (61) feet north of the southeast corner of Block 423A in the Town (now City) of Bakersfield, according to the map of said city, filed in the office of the County Recorder of the County of Kern, November 25, 1898, and running thence north and along the west line of said "D" street sixty-one (61) feet to the alley in said Block 423A; thence west at a right angle eighty-two (82) feet along the south line of said alley to the northwest corner of lot eighteen (18) in said block, thence at a right angle south and along the west line of said lot eighteen (18) sixty-one (61) feet to the place of beginning.

Being the north sixty-one (61) feet of lots eighteen (18), nineteen (19), and twenty (20), in said block 423A, and also all the estate, interest, homestead, property and other claim or demand in law and in equity which the grantors may now have or may hereafter acquire in or to the herein granted premises, with the appurtenances.

To have and to hold the same to said grantees as joint tenants with the right of survivorship, their successors and assigns in trust for the following purposes:

WHEREAS, Said grantors, shareholders in the Continental Building and Loan Association, a corporation, duly organized and existing under the laws of the State of California, have borrowed and received of said Continental Building and Loan Association in U. S. gold coin the sum of three thousand eight hundred (\$3,800) dollars, and have agreed to pay the same in one hundred and twenty (120) equal installments of fifty-three and 20/100 dollars each according to the terms of a certain promissory note of even date herewith, executed and delivered to said Continental Building and Loan Association by them, each to repay in U. S. gold coin all amounts of principal hereafter borrowed by said grantors from said Continental Building and Loan Association during the continuance of these trusts, not exceeding at any one time nine hundred and fifty (\$950) dollars and to pay interest thereon as may be agreed, and also do hereby agree to pay all taxes, assessments, and liens, excepting always such taxes and assessments as shall be assessed, levied or imposed, or the money or debt hereby or upon the interest in said real property created by this Deed of Trust, and all incumbrances now subsisting or which may hereafter subsist, or which may be imposed on the herein granted premises by State or other authority, and to keep said Continental Building and Loan Association, and the trustees acting under this deed, harmless and indemnified therefrom; and to protect said granted premises and every part thereof from sale therefor; and to keep the buildings now erected or which may be hereafter erected thereon insured against loss by fire in such company or companies as said Continental Building and Loan Association shall designate or approve, and in the sum of not less than three thousand eight hundred (\$3,800) dollars, and by policies, in which loss, if any, shall be made payable to said Continental Building and Loan Association, and to make such repairs and maintain the improvements on said premises as may, from time to time, be required by said corporation or the trustees by virtue hereof;

And should said grantors fail duly to pay, at maturity, any obligation, or to perform any of the covenants aforesaid, the said Continental Building and Loan Association, or its assigns, or said trustees, or the survivor of them, their successors and assigns, may at such time as they deem best, without previous notice to, and at the cost of said grantors, pay and discharge all taxes, assessments, liens and incumbrances agreed to be paid and discharged by said grantors, and effect insurance herein specified, more or less, in their discretion, and perform such other acts as they may deem best for the repair and protection of said premises and the improvements thereon.

Said Continental Building and Loan Association and said trustees, or the survivor of them, their successors and assigns are also hereby authorized, at such times as they may see fit, and at their own discretion, without notice to, and at the cost of said grantors, to prosecute, resist, compromise and settle any adverse suits, taxes, liens, incumbrances of claims (except the taxes and assessments hereinbefore excepted), and otherwise perform all the covenants herein agreed to be performed by said grantors.

And these trusts shall continue as security for repayment in U. S. gold coin of the money so borrowed and received and of all amounts of principal hereafter borrowed by said grantors from said Continental Building and Loan Association to the limit aforesaid, and the interest and premium thereon, and also for repayment of all money laid out and expended by virtue hereof with interest thereon, at the rate of two per cent (2%) per month, compounding monthly.

And also for two hundred and fifty (\$250.00) dollars in the U. S. gold coin as counsel fees, which shall immediately become due and payable to said trustees or the survivor of them, their successors or assigns, upon default made or suffered by said grantors in any of the matters aforesaid.

Now, if all indebtedness due or to become due under the provisions of this trust and secured hereby shall be duly paid and discharged at maturity, the said trustees, the survivor of them, their successors or assigns, shall reconvey all the premises and estate

to them, derived hereunder unto said grantors, their heirs and assigns, at their request and cost:

But if default shall be made in the payment of any of said indebtedness when due and payable, or in the performance of any of the covenants herein, then upon the request of said Continental Building and Loan Association, or its assigns, said trustees, or the survivor of them, their successors and assigns, are hereby empowered to sell for U. S. gold coin the granted premises and estate of such part or parts, or part at one time, and part at another, and so on, as in his or their discretion shall be deemed best, in the manner following, namely:

They shall first publish the time and place of such sale, with a description of the premises to be sold, at least twice a week for three successive weeks in some newspaper published in the City and County of San Francisco, and may from time to time postpone such sale to such time as they may elect by publication in the same newspaper, and on the day of sale so advertised, or to which said sale may be postponed, they may sell the property so advertised, or any part thereof at public auction, at the time and place so designated in said notice to the highest bidder for cash in U. S. gold coin, and the owner of such indebtedness, or any other person may purchase at such sale; and upon the payment therefor, said trustees or the survivor of them, their successors and assigns, shall execute and deliver to the purchaser or purchasers a deed or deeds of grant, bargain and sale of the premises so sold, and out of the proceeds of sale shall pay:

First—The expenses of executing this trust, including counsel fees, as aforesaid.

Second—The remaining indebtedness secured under the provisions of this trust.

Third—The surplus of such proceeds, if any, to said grantors, their heirs and assigns.

In the event of the sale of said premises, or any part thereof, and the execution of any deed or deed therefor by said trustees or the survivor of them, their successors or assigns, the recitals therein of default, request to sell, publication of notice of the time and place of sale, postponement of sale, terms of sale, sale purchaser, payment of purchaser money and of any other fact or facts affecting the regularity or validity of such sale shall be conclusive evidence of all the facts in said deed or deed recited against the grantors herein, their heirs and assigns, and all other persons.

It is hereby covenanted that said Continental Building and Loan Association may, by resolution of its Board of Directors, from time to time, appoint other trustees or trustee to execute the trusts hereby created, and upon such appointment and a conveyance to them duly made by the trustees herein named, the survivor of them, their successors or assigns, all the estate, interests, powers, duties, and trusts in the premises hereby vested in the trustees named in this deed, shall immediately become vested in and conferred upon said substituted trustees, and they shall thereupon become the successors and assigns of the trustees herein named, and a copy of said resolution duly certified by the secretary of said Continental Building and Loan Association, under its corporation seal, and attached to the conveyance last aforesaid, shall be conclusive against the grantors and all other persons that said substituted trustee or trustees have been duly appointed.

Witness the hands and seals of the grantors, the day and year first above written.

In the presence of

[SEAL.]
[SEAL.]

MARGUERITE J. EMMONS.
E. J. EMMONS.

STATE OF CALIFORNIA,) ss.
COUNTY OF KERN,)

On the 19th day of October, A. D. one thousand nine hundred and one, before me, W. Brooks Jones, a notary public in and for said Kern County, residing therein, duly commissioned and sworn, personally appeared Margueritte J. Emmons and E. J. Emmons (her husband), known to me to be the persons described herein, whose names are subscribed to and who executed the within instrument, and they duly acknowledged to me that they executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal, at my office in the County of Kern, the day and year last above written.

W. BROOKS JONES.

I hereby certify the foregoing to be a true copy of the original filed for record at the request of the Kern County Abstract Company, October 19, 1901, at 4:13 p. m. C. S. Meroney, Deputy Recorder; Chas. A. Lee, Recorder.

Complaint endorsed: No. 4136: Superior Court, County of Kern, State of California. Margueritte J. Emmons, et al., Plaintiffs, vs. David W. Loring, et al., Defendants. Complaint. Filed April 23, 1902. I. L. Miller, Clerk, By ———, Deputy Clerk. E. J. Emmons and S. G. Emmons, Plaintiff's Attorney. ———, Defendant's Attorney.

I, I. L. Miller, County Clerk of the County of Kern, State of California, and ex-officio Clerk of the Superior Court, do hereby certify the foregoing to be a full, true, and correct copy of the original complaint in the above-entitled cause, of record in my office, and that I have carefully compared the same with the original.

Witness my hand and official seal, this 4th day of February, 1905.

[SEAL.]

I. L. MILLER, County Clerk.

THE CHAIRMAN: Have you any other testimony or any other witness that you desire to call?

MR. CATOR: I desire to make this statement: I find myself at the present moment in a very peculiar position as an attorney, and one that I have no doubt a great many will sympathize with. I came into this matter, as I said before, unexpectedly, having come here entirely on different business, and expecting to go away. As you know, I sent a telegram to you to look after an election bill, and I supposed when I was asked to come into this matter at the outset, and other lawyers were not here, that other attorneys would come in. I was told by name whom they expected to have, but he did not materialize, and, by force of gravity, the whole matter largely fell upon my shoulders. I have done the best that I could in aiding the committee in its inquiry, and I have done the best I could for the accused, and intend to do so in the future, so far as legal services may be permissible, by way of analyzing the evidence or anything of that kind. But the powerful machinery which has been set in operation to-day, and the methods that have been used by the arrest of all the defendants at an early hour this evening, have deprived me of their association even, and I have no means of having their assistance, and whatever other evidence there was that we might have contemplated putting in, I have no means of producing it. I therefore, on behalf of the defendants, being authorized to use my best judgment, submit the case on their behalf, except so far as arguing it is concerned, and under the necessities and compulsion of the situation. Under the conditions that have been made and so forth, I expect to argue to this committee that the prosecution has not made out a case. Under different conditions, and had the defendants the right to appear and be sworn under oath, it would, of course, have been a different situation; but I believe that the case which has been made, when analyzed, on the part of the prosecution, together with the only opportunity the defendants have had of asserting their denial, which is on record in the Senate, that they have all denied this matter—will enable me to satisfy a reasonable committee in the end that the case which has been made by the prosecution does not warrant expulsion from the Senate.

MR. McNAB: We would say, Senators, please, that we refuse to recognize that we are here in any capacity as prosecutors. We were called upon by this Senate to furnish to this committee all the information that we possessed in regard to the matters presented in our affidavit to the Senate when Mr. Corbin was cited here for contempt. We feel that in doing that, we have exercised our full duty, and treated the commands of the Senate and this committee with due respect. We feel that the matter of argument and an analysis of the testimony would place us in a false position. We believe that the whole matter is with this committee, and that the matter of a legal argument, such as would appear in court, where a prisoner is at the bar or a civil matter is under consideration, would be in somewhat bad form on our part, and unless called upon by this committee to do so, we would certainly not feel it our duty, or a matter of propriety, to review the evidence.

MR. SIMPSON: I for one, do not want to insist on argument from anybody in the case, but if Mr. Cator desires to argue it, I think the committee ought to give him ample opportunity to do so, Mr. Chairman.

THE CHAIRMAN: That is my opinion, too. So far as I am personally

concerned, I have tried to be as liberal and as fair in conducting this case as I knew how. So far as I am personally concerned, I do not care to hear any argument; but I would not deprive either side of the opportunity of making an argument if they so desire. If Mr. Cator desires to present argument, either written or oral, as far as I am concerned—now, I am speaking for myself; I do not know how the rest of my colleagues on the committee feel—I would be perfectly willing to let him take his choice, and would be willing to set a time to suit his convenience and give him a reasonable length of time to argue the matter before the committee if he desires to do so orally, or give him a reasonable length of time within which to prepare a written argument, if he desires to submit a written argument, instead of an oral argument.

MR. CATOR: I have no time, on account of my engagements, to present a written argument, and I have not much time to present oral argument. The testimony is rather voluminous, and I do not think it is necessary to call attention to but a few things in it.

MR. SIMPSON: About how long will it take you to make your argument, do you think?

MR. CATOR: I believe it would be the right of the accused to point out to the committee wherein we consider that the evidence is so weak that nobody ought to be convicted upon it.

MR. SIMPSON: About how long will it take you?

MR. CATOR: I have not all the testimony. I suppose that I should be allowed an hour and a half, possibly. I may not use that much time; I would not exceed that.

MR. SIMPSON: Would Monday evening be satisfactory to you?

MR. CATOR: I cannot say now.

MR. SIMPSON: Most of the committee is going away to-morrow morning.

MR. RALSTON: A suggestion has been made by one of the Senators that it might be that Senator Cator would like to present argument in defense of the Senators before the bar of the Senate, and if he wishes to do that, or if the Senators wish him to do that, would you not prefer to present that before the bar of the Senate, rather than before this committee?

THE CHAIRMAN: I think Mr. Cator's intention in desiring to argue the proposition before the committee is to endeavor to guide and help the committee in making its report to the Senate. Is not that correct, Mr. Cator? Then afterwards, if he so desires, I presume that the Senate, when they take up the report of the committee, would allow Mr. Cator to address them, depending, of course, upon the report of the committee. It might be that the report of the committee would be such that it would not require any argument.

MR. CATOR: I was going to say I cannot anticipate, and of course trust, that there will not be any report which would require my presence there; but of course I know nothing of that. Unless the report should be adverse to the accused, of course they have no occasion to be represented at the bar of the Senate. I will try and be as brief as I can in analyzing the evidence which I think is material, and probably I will not take an hour and a half, but I suggested that length of time so that the committee would be prepared to give me that if I thought I needed it. There has been quite a large volume of testimony here to be referred to.

THE CHAIRMAN: Could you take up your argument on Monday evening?

MR. CATOR: I presume I can. I have a case set in San Francisco for

Monday morning. I presume I could come here in the evening, so that I could go back and take that matter up. It is important; I suppose you could not set it for Saturday evening?

THE CHAIRMAN: I am a member of a committee which is going to visit San Quentin on Saturday, and we want to leave here on Friday evening so we can go over there on the early morning boat so we can make an investigation of that institution, and I for one could not be here, and Senator Ralston is also a member of that committee, and we could not be here to-morrow night or Saturday either, and that would necessarily carry it over Monday, and we would, of course, like to make our report to the Senate as soon as possible, and I have no doubt that the committee will want to deliberate very seriously and at full length before a report is made to the Senate, and we would like to have, if possible, your argument on Monday evening, and if the other side desires to present any argument, we will be glad to hear from them.

MR. McNAB: It has been suggested to me by my associate that if Mr. Cator is going to make a lengthy argument, and as clients of ours are involved more or less, if not directly, indirectly, in this transaction and in this hearing, that it may be considered not indelicate to present it on that ground on Monday night, and we would like to have the matter to be left open, at the same time insisting upon the proposition that we are in no sense representing prosecutors in this matter.

THE CHAIRMAN: We will take it, Mr. McNab, that you were endeavoring to help the committee to reach a conclusion in the matter.

MR. McNAB: In analyzing the testimony as presented.

MR. NICHOL: Inasmuch as we have brought a large number of witnesses here, we stand sponsors for those witnesses. I judge from the suggestion of my brother's that he is going to attack those witnesses. If we do not say anything, they will stand here undefended, and we do not want to leave our witnesses in that position, and by the grace of the committee, we will reply to Mr. Cator's argument.

THE CHAIRMAN: We will expect to close next Monday night, and, Mr. Cator, you will appear here and present your argument, and you [pointing to Messrs. McNab and Nicol] will reply on Monday night.

MR. SIMPSON: Do you expect to open the argument, Mr. Cator?

MR. CATOR: I am sure I do not know what order it ought to take. I assume that notwithstanding all this bowing and abnegation—that there is no prosecution, and all that—

MR. SIMPSON (interrupting): That there will be plenty of argument; that is my idea of it, that when you get started everybody will want to have something to say.

MR. CATOR: In courts of law, the prosecution closes the argument. One would suppose here that these accused Senators could close the argument; but anything suits me.

MR. McNAB: Anything will suit us.

MR. ROWELL: If all of you conclude not to make any argument, notify the committee, so that we will not be called for that purpose.

(On motion of Mr. Ralston, duly seconded, an adjournment was taken until Monday, February 13, 1905, at 8 P. M.)

TENTH SESSION.

SACRAMENTO, 8. P. M. February 13, 1905.

THE CHAIRMAN: Please be in order. Mr. Reporter, you will please make this telegram from Messrs. Myrtle and Barrett to Al. Murphy, of the "Examiner," a part of the record. I understand that there is another telegram that they cannot find just at present, but Mr. Murphy has given instructions to have the operator look it up.

(Telegram marked "Exhibit H, J. A. Vaughan, Reporter," and is as follows:

"32 S. F. Qn. Jf. Paid. Dpr.

"SAN FRANCISCO, CAL., Jan. 23, 1905.

"AL. MURPHY, *Examiner Correspondent, Sacramento, Cal.*:

"Please tell Senator French that Palethorpe and I join in advice that his committee subpoena C. D. Stuart, the Auditor of the Continental. Also have committee make a demand for the right cash balances kept by the Cashier, H. M. Dorsey, during the year 1904.

"FRED MYRTLE.

"Al., please do this.

"J. P. BARRETT."

"32" is the number of the telegram from San Francisco to Sacramento. "S. F." means that it was sent from the San Francisco office. "Qn" is the telegraph operator that transmitted it. "Jf" is the operator that received it at Sacramento. "Paid" means the telegram was prepaid at San Francisco. "Dpr" means day press rate.)

THE CHAIRMAN: Mr. Cator, how many of the gentlemen of counsel for the defense desire to address the committee?

MR. CATOR: I understand that an analysis of the evidence has been left to myself alone, and that the others have consented not to speak, and it has been left to me, and if I should require a few moments time more than an hour and a half, I ask that I be allowed that extra time.

THE CHAIRMAN: How much time do you desire?

MR. CATOR: An hour and a half.

THE CHAIRMAN: An hour and a half?

MR. CATOR: That is what I said the other night. Of course I will try to complete my argument within that time, but if by any possibility I should require five or ten minutes longer, I hope not to be shut off by the committee.

THE CHAIRMAN: I do not suppose the committee will be inclined to cut you off for five or ten minutes.

MR. CATOR: I will promise it will not exceed that length of time. I will take my watch out.

THE CHAIRMAN: Then it is understood that the argument will be confined to an hour and a half on both sides.

MR. CATOR: With that understanding, that if it is transgressed by a very few moments—

THE CHAIRMAN: That is understood.

MR. SIMPSON: I suppose Mr. Cator will open. Is that satisfactory?

MR. McNAB: Yes, sir.

MR. CATOR: I understand it is now a quarter past 8, and we will operate by that clock.

MR. SIMPSON: It is understood, Mr. Cator, that you will open for your side and these gentlemen will close?

MR. CATOR: I have no objection to their closing, although this is a case in which there should not be any prosecution at this stage. Still, as there has been a prosecution all the time, I expect it to continue to the end, and do not care to interrupt it, and think it will do us more good than harm before the people.

Mr. Chairman and Gentlemen of the Committee: I am requested by my associates, prior to my argument, to file the following protest. Of course, the argument will show why this protest should be observed after the argument is finished.

(Protest read by Mr. Cator, marked "Exhibit I—J. A. Vaughan, Reporter," and is as follows):

To the Senate Committee selected January 30, 1905, directed to investigate charges of bribery made against Senators Emmons, Bunkers, Wright, and French, by the affidavit of William Corbin:

The said accused Senators by their attorney hereby enter before your committee the following protest upon the grounds herein stated:

1. They respectfully protest against any report upon the guilt of said accused Senators being made herein until a verdict shall have been rendered by a jury upon the indictments now pending in the Criminal Court of Sacramento County, because such a report is sought by the persons prosecuting before this committee for the purpose of prejudicing such accused in the trial to be had in such Criminal Court, and to be used to influence and bias the minds of the people of Sacramento County, from which a jury must be drawn to try the accused, and because a report by this committee might deprive the said accused from obtaining an impartial jury and a fair trial upon such indictments.

2. Because it is the practice of the Senate of the United States not to raise a committee to report against or question the seats of its members charged with bribery upon which criminal indictments are being prosecuted until after the verdict of a jury, and the affirmation thereof, as is witnessed in the cases of Senators Mitchell of Oregon and Burton of Kansas, now under indictment for receiving bribes to use their influence as Senators in violation of law, who still sit in their seats in said Senate of the United States.

3. Because in the present case the persons prosecuting these accused Senators before this committee, having given all their testimony under oath before this committee, have objected to the accused being heard in the same manner.

4. Because the District Attorney of Sacramento County, having taken the entire case before the Grand Jury of said county, and having procured indictments in the criminal courts, and having applied to the Senate of California to prohibit the accused Senators from making their defense under oath in the usual manner, and the Senate having granted such request, and having deprived the accused of the right to be sworn and give their testimony as the prosecution has done, and in the usual way, such action on the part of the Senate amounts to turning the case over to the District Attorney and the criminal courts for trial before the accused are heard in defense by the Senate in the usual manner, and therefore it is not right or just that a report under such circumstances should be made by the committee upon incomplete evidence, which report might prevent the accused from obtaining an unbiased and fair jury in the courts of said county.

5. Because on the evening of February 10th, when the accused Senators were still defending themselves before this committee, and as said committee was about to meet, the prosecution caused indictments to be filed after 7 o'clock P. M. against the accused by sending for a judge to his house, and procured bench warrants to be issued thereon and arrested three of the accused, and sought the fourth, and took them away from their defense and opportunity to participate in their defense, although no suggestion exists that there was any occasion to arrest such accused at that unseemly hour or inappropriate time. That the accused have each arisen in their seats in the Senate of California, in the presence of the Senate and of the Senators on this committee, and upon the reading of the said affidavit of said William Corbin, each of said accused, solemnly and with all the power possible to persons not under oath, did each deny for himself all the charges of bribery contained in said affidavit, which statements stand as the denial of the accused, who, being denied their just and lawful right to make such denial under oath, cannot make any stronger denial. That protesting against the action, denying those accused the right to testify under oath in their defense, but without the power to change the order of the Senate in this respect, they solemnly protest against a report by this committee upon incomplete evidence, being made after their indictment, and before their trial in court, which might prevent their obtaining an unbiased jury, and a fair trial and

demand in common fairness that the report of this committee in accord with the practice of the Senate of the United States, be deferred until after the verdict of a jury upon the trial of such indictments.

Sacramento, Cal., Feb. 13, 1905.

THOMAS V. CATOR,
JAMES L. COPELAND,
JOHN E. ALEXANDER,
F. C. JACOBS,

Attorneys for the Senators under investigation.

(Argument by Thomas V. Cator, Esq., and Gavin McNab, Esq.)

THE CHAIRMAN: Is there anything further that counsel from either side desire to bring forth to the committee?

MR. CATOR: Nothing, more than I ask the committee to submit to the Senate to-morrow the interrogatory as to whether they should not withhold their report until the verdict of a jury.

THE CHAIRMAN: The committee will decide that.

MR. CATOR: It is understood that this protest is incorporated in the record?

THE CHAIRMAN: Yes, sir. So far as further public meetings of this committee is concerned, they will be discontinued, and whatever further meetings the committee may have for the purpose of going over the testimony and discussing the case in all of its different phases prior to the formation of a report to be delivered to the Senate, will be in executive session.

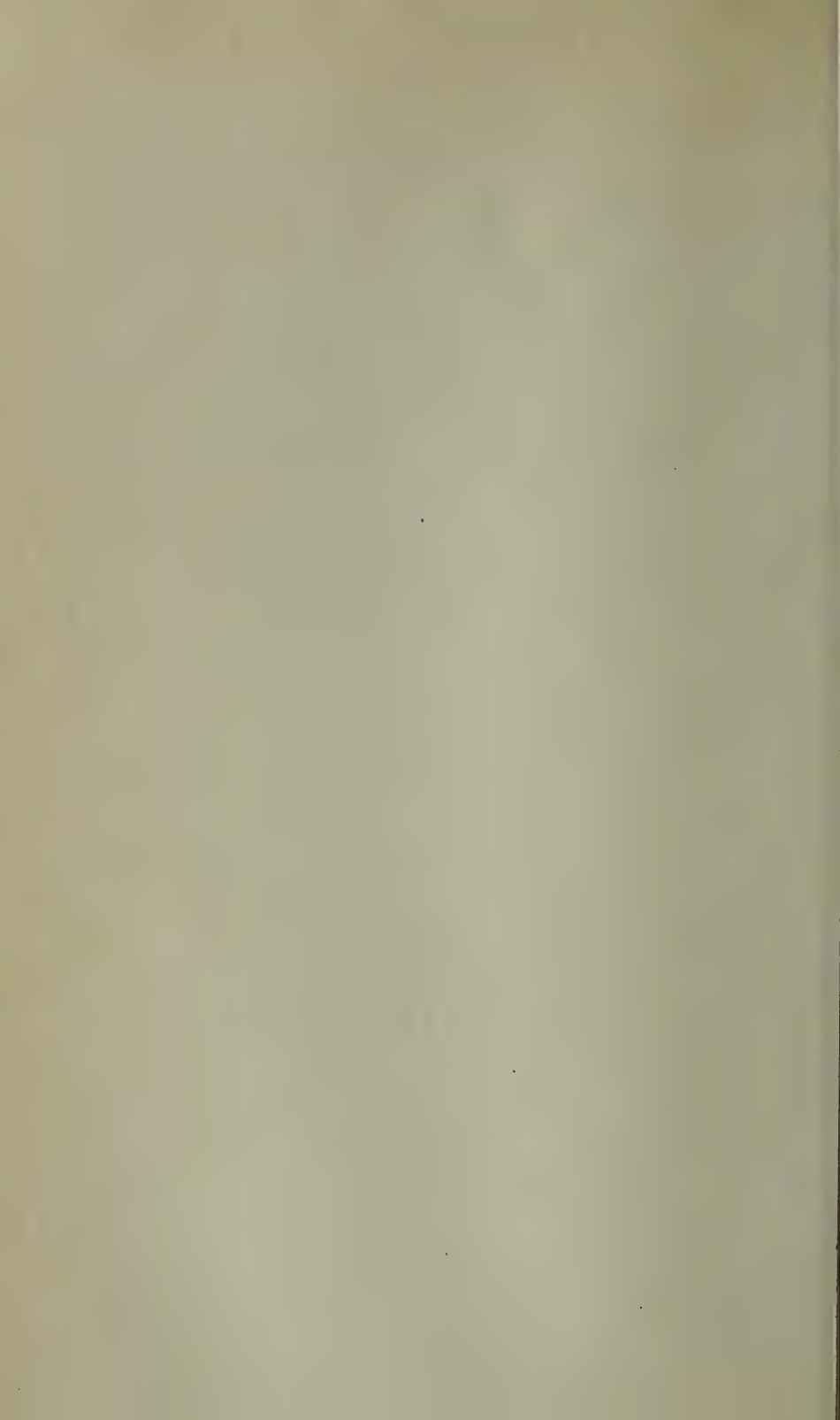
On motion of Mr. Ralston, duly seconded, adjourned.

INDEX.

	PAGE.		PAGE.
ANDERSON, ALDEN	205	FINLAYSON, FRANK G.	266
BAILEY, H. D.	268	Cross-examination	266
Cross-examination	268	FOGARTY, T. H.	173
BALDWIN, F. A.	269	Cross-examination	173
Cross-examination	269	FOX, CHARLES P.	170
BAUER, HAMILTON	216	Cross-examination	170
BERNARD, JAMES A.	187	GRANGE, CLARENCE	9
Cross-examination	187	Cross-examination	13
BLODGET, H. A.	258	GRAY, CLARENCE	196
BOUST, E. J.	248	Cross-examination	196
Cross-examination	249	HAMILTON, EDWARD H.	332
BRANDISH, A. J.	267	HARTLING, HENRY	73
Cross-examination	267	Cross-examination	78
BRISCOE, J. W.	189, 245	HEINS, MOSES	100
Cross-examination	245	HIRSHBERG, D. S.	257
BRUNDAGE, B. L.	171	Cross-examination	258
Cross-examination	171	HOLMES, MYRON	175
CARRIGAN, ANDREW	263	Cross-examination	175
Cross-examination	263	JAMESON, JAMES W.	177
COGGINS, CLIFFORD	209	Cross-examination	177
CONRADI, PHILIP	261	JONES, J. O.	264
Cross-examination	261	Cross-examination	264
CORBIN, WILLIAM	5	JORDAN, JOSEPH S.	278
Recalled	7, 102	Recalled	294
Cross-examination	104	Cross-examination	294
CROSS, C. W.	193	KEMBLE, B. F.	260
Cross-examination	194	Cross-examination	261
DALEY, W. H.	231	LITTLEJOHN, B. F.	152
Cross-examination	231	Cross-examination	153
DALY, J. S.	197	MAGUIRE, JAMES G.	256
Cross-examination	198	Cross-examination	257
DEL VALLE, R. F.	265	MARTIN, J. LOUIS	311
Cross examination	265	Cross-examined	312
DOOLEY, JOHN F.	186	McNAB, GAVIN	32
Cross-examination	186	Recalled	59
DOVER, H. P.	169	MORTON, H. D.	259
Cross-examination	170	MURPHY, AL.	318
DUNLAP, SAM J.	178	MYRTLE, F. E.	327
Cross-examination	179	NICHOLS, C. O.	201
ERHART, MARGARET	72	Cross-examination	201, 230

	PAGE.		PAGE.
NICHOLS, C. O.—Recalled	230	THOMPSON, F.W.—Cross-examination	262
OLDER, FREMONT	37	TIBBETT, BERT M.....	183
Cross-examination.....	39	Cross-examination.....	183
RAMBO, S. H.	220	TICHENOR, GEORGE N.....	48
ROBERT, DENT H.	44	Recalled	116
ROUSSEAU, S.	244	Cross-examination.....	121
RUSSELL, WILLIAM	101	VAUGHAN, J. A.....	310
SCHAFER, A. F.....	237	Resumed.....	313
Cross-examination.....	237	WEHE, FRANK R.....	225
SCHMITZ, E. E.....	57	Cross-examination.....	227
THOMPSON, F. W.....	262	WELCH, R. J.....	167

Senator Emmons presented as a witness, and objection thereto and proceedings. 272-278
Resolution and order of Senate not to allow accused Senators to testify 292, 293



IN THE SENATE OF THE STATE OF CALIFORNIA.

BEFORE

Special Committee of Investigation

CONSISTING OF

Senators Belshaw (Chairman), Simpson, Diggs, Rowell and Ralston.

In the matter of the Investigation of Charges against Senators Emmons,
French, Bunkers and Wright, presented by William Corbin.

SUPPLEMENTARY TESTIMONY

AND

Report of Special Committee of Investigation

SACRAMENTO:

W. W. SHANNON, - SUPT. STATE PRINTING
1905.

INDEX.

REPORT OF THE COMMITTEE.....	50
TESTIMONY—	
BELSHAW, C. M.....	45
KELLY, MARTIN	7
Cross-examination	15
McNAB, GAVIN.....	40



IN THE SENATE OF THE STATE OF CALIFORNIA

IN RE INVESTIGATION OF CHARGES PRESENTED BY WILLIAM CORBIN AGAINST SENATORS BUNKERS, FRENCH, EMMONS AND WRIGHT, BY SPECIAL SENATE COMMITTEE, CONSISTING OF BELSHAW (CHAIRMAN), ROWELL, DIGGS, RALSTON AND SIMPSON.

ELEVENTH SESSION.

SACRAMENTO, FRIDAY, February 17, 1905, 1 P. M.

(Executive session. All the members of the Committee present.)

THE CHAIRMAN: Gentlemen of the Committee, you remember that last Monday I told you that I had information that somebody had information about one of the Senators connected with this matter, and a statement concerning one of the Senators in connection with one of these bills. You will remember that I stated to you that I was informed that there was some one who would make a statement to me concerning it, and if you so desired, and appointed me as a committee of one representing the committee, that I would see if I could not make arrangements to meet the gentleman. You remember that that was done.

THE COMMITTEEMEN: Yes, sir.

THE CHAIRMAN: I saw Mr. McNab on Monday evening, and talked with him about the matter, and he said that he would try to arrange to have the person see me who knew about it, or claimed to know about it, and I told him, "All right; you try to make arrangements to have the gentleman see me, and I will be in the Golden Eagle Hotel somewhere between half-past eleven and twelve o'clock, and you wait there for me, if you can make the arrangement." I went into the Golden Eagle about a quarter of twelve, I should say, and I met Mr. McNab, and he told me that if I would go to room No. 62 in the Capital Hotel that I would find Mr. Martin Kelly there waiting for me, and that he had a statement he desired making to me. I went to room 62, Capital Hotel, and saw Kelly there. Now, I would like to have Mr. Kelly state before this committee what he stated to me at that time, at that meeting, if he will.

MR. MARTIN KELLY: You spoke to me first.

THE CHAIRMAN: Yes, sir; all of the conversation that happened.

MR. KELLY: Am I to be sworn?

THE CHAIRMAN: We would prefer you to make a statement to the committee, if you will.

MR. KELLY: I prefer to be under oath here.

MR. DIGGS: As far as I am concerned, I think if Mr. Kelly makes a statement, it is all that is necessary, as far as I am concerned.

MR. SIMPSON: Are you willing to make a statement without being put under oath?

MR. KELLY: No, sir.

MR. SIMPSON: What do you think about it?

MR. RALSTON: What is your objection, Mr. Kelly?

MR. KELLY: Well, Mr. Belshaw told me that—urged upon me to come here under oath, and make a statement to this committee of the facts that I know as regards the transaction between myself and Mr. French.

MR. RALSTON: Your memory is perfectly clear as to what you told Mr. Belshaw, is it not, Mr. Kelly? A. Sir?

MR. RALSTON: At that time; I say your memory is perfectly clear?

MR. KELLY: I meant to be under oath. I want to know whether Mr. Belshaw's mind is clear in what he said to me.

MR. DIGGS: May be a statement from Mr. Belshaw—

MR. SIMPSON (interrupting): I prefer to have the statement of Mr. Belshaw under oath. It is hearsay testimony in this matter, and I prefer to have this under oath.

MR. KELLY: I want to make this statement: I know nothing about your committee that you are investigating. I know nothing about the bribery charge; I do not know anything about that, but anything that Mr. Belshaw wants me to refer to as regards a matter that was spoken of between a man that acted as my attorney, under a question of privilege, and he not only deceived me, but I think has deceived Mr. Belshaw. Therefore, it is necessary that I should be put under oath before I can—

MR. SIMPSON: Have you an attorney, Mr. Kelly?

MR. KELLY: No, sir.

MR. SIMPSON: Advising you in this matter?

MR. KELLY: Not in this matter.

MR. SIMPSON: I understood you spoke of an attorney, under a question of privilege.

MR. KELLY: I will explain all that if I am put under oath. The attorney I am speaking of is Mr. Gavin McNab.

MR. SIMPSON: Is he here?

THE CHAIRMAN: Yes, sir. Do you want him brought in?

MR. SIMPSON: I think he should be brought in. Mr. Kelly is entitled by all means to be put under oath. That is the situation.

MR. ROWELL: He is entitled to that, or else he refuses to testify.

MR. SIMPSON: Most assuredly. There is no question about that.

MR. ROWELL: Does this have any bearing directly on the matter we have under investigation?

THE CHAIRMAN: Yes, sir.

MR. SIMPSON: You are in the possession of this situation particularly, and the rest of the committee is in a quandary as to what they should do at this time. I am, for one. Of course we do not know at the present time what statement was made to you. We do not know whether that statement will be paralleled here to-day or not, or whether the testimony under oath will corroborate that statement—that is, as to this particular witness; and we do not know that it will not be. The Senate has taken a stand in this matter—

MR. RALSTON (interrupting): That is a different proposition, because they were officers and members of the Senate. That is not a parallel case as far as I am concerned. They are officers of the Senate, and took oath to support the Constitution of the United States and the Constitution of the State of California, and they are members of the Senate.

THE CHAIRMAN: I do not think there is any question but what if he refuses to testify except under oath we can not make him testify.

MR. SIMPSON: No.

(Here the Chairman left the room and returned in a few minutes.)

THE CHAIRMAN: You will be sworn.

TESTIMONY OF MARTIN KELLY.

Sworn.

MR. SIMPSON: I would suggest, Mr. Chairman, that you question the witness, you knowing the situation.

THE CHAIRMAN: Proceed with your statement, Mr. Kelly.

THE WITNESS: Gentlemen, as I said before, I know nothing of the Committee on Retrenchment and Commissions; I think that is the name of the committee, is it not?

THE CHAIRMAN: Commissions and Retrenchment.

THE WITNESS: I know nothing about their actions; I know nothing about their business as far as this investigation is concerned. I will have to begin with my connection with Mr. Gavin McNab, one the attorneys that has been acting before your committee.

Q. Of course, that was prior to your meeting with me, or our conversation in room 62 of the Capital Hotel? A. That is the foundation or basis of the matter, you might say, without any due notice to me.

Q. Didn't you agree with Mr. McNab to meet me? A. No, sir—no, sir; not with any special meeting to meet you. I will explain all that as I come to it.

Q. Did not Mr. McNab take you up to his room, No. 62? A. No, sir.

Q. In the Capital? A. No, sir; he did not.

Q. And tell you I would be there? A. No, sir; not that way. If you will allow me, I will tell you the whole circumstance.

Q. All right; proceed. A. I got acquainted with Mr. McNab about twenty years ago, but within the last two years I had some business—political business—with Mr. McNab, in which he contracted with me to pay certain bills. I want to say—

MR. RALSTON: I do not think that has anything to do with this thing.

THE CHAIRMAN: I do not think it is material at all.

THE WITNESS: It is material to my connection with Mr. McNab.

(Here the witness looks at memorandum.)

MR. SIMPSON: Q. Are you reading from a statement that is written down? A. No, sir; I am merely looking for the date—for the amount of the contract.

Q. That matter is not particularly important, as to when you met Mr. McNab, or what business dealings you had with him in the past. We would prefer that you bring this narrative reasonably up to the time of this investigation. A. I had business relations with Mr.

McNab, which he has never paid, only by installments, and that it is within the last six months he has commenced to pay.

THE CHAIRMAN: Q. That cuts no ice with this investigation. A. During this investigation I rang him up several times within the last month or before that, and wanted to know when he was going to pay that bill. A week ago last Saturday I rang him up, and he said that he would be ready next Saturday to pay me something on account. That was last Saturday. On Saturday I rang him up, and asked him if he was ready to pay me part of that bill, or the whole of it. He said, "Come down at a certain time"—I forget what time it was—a week ago last Saturday—no, that was last Saturday—to come down at a certain time on last Saturday. I went down there, and he said, "Mr. Kelly, I can only pay you \$25 to-day." That is a small amount—

MR. SIMPSON: Q. (Interrupting.) Where was this? A. Down at his office.

Q. In San Francisco? A. Yes, sir; in the Mills Building.

Q. Last Saturday? A. Yes, sir; last Saturday. And I took the \$25. I says, "Well, I am glad you are paying some of it, anyhow." He says, "None of my people are paying anything; I have to pay this out of my own pocket." I says, "You and I made a contract; I do not know anybody else in there but yourself." I says, "I have to pay my money out and I expect you to pay me; it is now a year and a half." Each time that he paid me anything he has always wanted something else in return—some favor in politics or otherwise—politically principally. So, after he got through, after he paid me, he got to talking about this scandal—

MR. SIMPSON: Q. You mean the investigation of these charges? A. Investigation of these charges—about the indictment of the four Senators—and I says, "Those four men are charged with a crime." He said, "Yes, sir." Now, I said to Mr. McNab, "I want to talk to you now as an attorney on a question of privilege and as a client." He says, "All right, Mr. Kelly;" he says, "As a question of privilege and as a client we will talk." "All right," I said; "those men are charged with a crime;" I says, "I have been watching this thing pretty close," and I said, "During the night of the Corbin excitement, after this affidavit was read in the Senate and it was published in the papers," I said, "I was talking to Mr. French—

THE CHAIRMAN (interrupting): Published in the "Bulletin," I suppose you mean? A. No; published in town. I heard it in town. I had not read the "Bulletin" until after I had heard it all over town. I said, "I met Senator French"—him and I have been friends a great many years; while I do not agree with him politically, in a good many political connections—

MR. SIMPSON: Q. (Interrupting.) Did you tell Mr. McNab when you had talked with Senator French? A. Yes, sir; I told him—talked with him Saturday evening last; I told McNab, but I talked with Senator French on the evening of the 30th of January.

THE CHAIRMAN: Q. Which was Monday evening? A. Yes, sir.

MR. SIMPSON: Q. Do you mean January or February?

THE CHAIRMAN: January 30th.

THE WITNESS: January 30th. And that I told Mr. French that he ought to have got upon the floor of the Senate and made a fight—made his fight when such a charge as that was made; and I was talking to

him, presuming that the affidavit was false, and he went away. About a half an hour afterwards he came back; he was coming back on the other side of the street; I met him——

THE CHAIRMAN: Q. Excuse me, Mr. Kelly, for interrupting here. You are telling what you told Mr. McNab? A. Yes, sir.

Q. The question that I wanted to ask was the statement that you made to me. A. From last Saturday to Monday night at 12 o'clock I have got to go through a good many things here.

Q. All right; proceed. A. I talked personally to French——

MR. RALSTON: Q. (Interrupting.) The second time; you met him the second time? A. I told Mr. McNab this, and French said to me—he said, “Kelly, you are just the man I want to see; come down the street a little ways,” and I walked down the street with him, and he says, “I have just heard that they are trying to get a warrant out to have us all arrested, and to search us and get what money we have got.” I said, “Well, I guess they can do that.” So we proceeded down the street probably two blocks, and Mr. French says, “Kelly”—I told Mr. McNab something that happened prior to this. I spoke about Mr. French, and my own transactions with Mr. French, where I had been advancing money to him, and I says to McNab, “When I was walking down the street, French says to me, ‘Kelly, here is \$50, and I will give you more when I get it.’” We walked down as far as Fifth street, and he says, “I think I will go back.” I took the fifty-dollar bill, and I put it in my pocket, and never looked at it, and I——

THE CHAIRMAN: Q. Excuse me. Let me ask you a question. Didn't you tell Mr. McNab—you have just made a statement of what you said—didn't you tell Mr. McNab that French handed you a fifty-dollar bill and said, “Get it out of Sacramento as quickly as possible?” A. No, sir; never in the world; no, sir; never in the world; and Mr. McNab never said that until he said it to you yesterday. I told Mr. McNab that I put that fifty-dollar bill in an envelope, and put it inside of another envelope, and mailed it to myself in San Francisco, through a shrewd, astute caution of not knowing whether it was one of those bills that was talked about on the street. I had not read the “Bulletin” up to that time. I afterwards read the “Bulletin,” and I saw that there was a lot of marked bills published in the “Bulletin.” I thought no more about it. On the first day of February I had to go to San Francisco on some business of my own, and I started away at 3 in the morning, and the train—it was the first of the month, and the schedule time of the railroad had been changed—and the train that I took to go home in the morning went by way of Livermore and Niles, and I did not get into San Francisco until 11 o'clock in the morning. I reached my home somewhere before 12—most 12 o'clock. I said to my daughters, “Get me something to eat; I have got to hurry up town.” I sat down in the dining-room, and my daughters got me something to eat, and went on about their business, and a young gentleman that is married to a relative of mine in the house was sitting at one of the windows. My daughters put my mail on the table where I was eating. I took the envelopes, opened my mail, and threw the envelopes in the cuspidor, read my mail, and I finally came to this letter that I had mailed the fifty-dollar bill in, and I opened the envelope and took out the inside envelope and laid it on the table. I said, “Is the ‘Bulletin’ here?” and the young man reached over—I says, “I want Monday

night's 'Bulletin,'" and he handed me over Monday night's "Bulletin"——

THE CHAIRMAN: Q. This was on the 2d of February? A. This was on the first day. I was telling this to Mr. McNab.

Q. This was on the 2d of February; you went down on the 1st. A. No; this was the 1st.

Q. The morning of the 1st? A. Yes, sir; I came back that evening.

Q. Oh, yes. A. I said, "George," taking the envelope—here is the envelope, marked "private" [exhibiting], and I took my knife and cut the end of it off—never opened it at all; cut the end of it off, and laid it down, and I took hold of the "Bulletin," and I says, "George, take that upstairs to the library, and ask my daughter to see the number of that bill." And I took my pencil, and I put a pencil mark around the "Bulletin" to the commencement of the list of bills, which I had been in the habit of doing when I would tell one of my daughters to cut out a scrap and put it in my book; I would mark it around. I says, "You tell her to commence right there, and give me the number of the bill," and I put that on top of the newspaper. I never said a word about the bill inside of the envelope or anything of the kind. He went upstairs, and he says to my daughter, "Your father wants the number of this bill, and to write it down on a piece of paper." So, I said to Mr. McNab—I said, "Those men"—I may as well tell the rest of it—I says, "The number of the bill that you supposed she wrote down was the bill that was in the envelope, but she wrote down the number of the bill that was on top of the paper from the paper, but I presumed at the time it was the number of the bill that was in the envelope." She never opened the envelope at the time, but I presumed at that time that I was talking to McNab that it was the bill that was in the envelope that she had written down on a piece of paper, and I took the number that she wrote down; I put it in my book, and when I went upstairs after it I took the number and put it in my book, and I took the newspaper and the envelope, and locked it up, and in talking to McNab I said, "Those men are charged with committing a crime," and I said, "If money is used in committing a crime it is a part of the evidence, is it not?" He said, "Yes." "Well," I said, "I don't know; I have not seen this bill myself, but," I said, "I think that the bill I got from Mr. French is one of those bills, but I am not sure." He said, "Do you control it?" "Well," I says, "I have not seen it since it was put away, and I did not see it then; only somebody else, I think, saw it"—not telling him at the time who it was and who I imagined saw it. He says, "Will you give it to me?" "Well," I said, "no." He says, "Have you got absolute control?" I says, "I will see whether I have or not." I had not seen the envelope; it was locked up, and I went home—I says, "I am going home to-night, and I will see." So, that night I went home, and I unlocked the drawer, and I saw the envelope and the paper just where I put it, and I locked it up again. I never looked at it at all; never opened the bill from the time I got it until yesterday morning, and Mr. McNab was so anxious to see it that he rang me up three times last Sunday evening, and I was not at home, and my daughter says, "There is a gentleman named McNab rang you up, pa, and he said his name was Gavin McNab—says he rang you up twice." I says, "If he rings up again give him the 'phone where I am, and tell him to ring up where I am"; and in about half an hour Mr.

Gavin McNab rang me up. He says, "Is that all right; is it under your control?" I could not understand him very well through the 'phone, and I said, "Yes, it is all right." He says, "At what time are you going to Sacramento?" I says, "I am going to Sacramento to-morrow morning." He says, "Are you going on the 9 o'clock?" I said, "Yes, I am going on the 9 o'clock train." That was last Monday morning. He says, "I will see you on the train." I said, "All right." So, I took the train at 9 o'clock—that is, the boat at 9 o'clock, and we took the Overland Limited. I sat in one of the men's smokers of the Pullman. There is no smoking allowed on that train. There was a whole crowd sat in the regular smoker—observatory car—and at about half-past 11 Mr. Gavin McNab come in, and he sat alongside of me. He says, "Kelly"—"Oh," I said to him, "what did you mean when you rang me up last night by asking me if that was all right?" He says, "I wanted to know if you had control of that bill you are talking about." I said, "Yes, I have." "Well," he says, "would you like—I would like to get it." He says, "I would like to get it in print." "Well," I says, "I do not know whether it is one of those bills or not myself. I have got to see it first; I have not looked at it at all, and" I says, "until I see it I will not be positive. I will go outside of the rights of the question of privilege with you."

MR. SIMPSON: Q. What date was this conversation? A. This was last Monday.

Q. Fix the time of day? A. Last Monday between 11 and 12, coming up on the train; between 11 and 12 o'clock, I guess—coming up on the train.

THE CHAIRMAN: Q. Monday was the 13th? A. Yes, sir. On Saturday was the first time I was talking to him.

Q. That was the 11th? A. Yes, sir. And I said, "Until I am positive of this matter I am not going outside to talk to a third party," and I said, "If I have anything in my possession that has been used, and has got to be used in evidence, I shall certainly comply with the law," and he was very anxious then. He says, "Would you not like to show it to the committee?" I says, "No, I have nothing to show to the committee." I says, "These men are charged with a crime, and the only thing I am interested in is, if I have got a bill that has been used in the commission of a crime, and it is needed in evidence, I want to be in a position so that I won't commit a crime by concealing it"; but Mr. McNab was in such a great hurry for me to show it to somebody. I says, "Mr. McNab, I shall not show that to a third party until I am positive it is one of those bills that has been committed in that crime." I says, "Until I am positive myself, I will not do it." He said, "Would you like to talk to one of the committee?" I said, "No, sir; I will not talk on this subject until I am sure of what I am talking about." Then he discussed about Mr. Belshaw. I told him, "I thought Mr. Belshaw was an honest man and a square fellow," and I says, "I think he is a decent man." He says, "Would you not like to talk to him?" And I said, "Not on that subject until the proper time." I says, "I merely opened this matter with you on a question of privilege." With that Mr. McNab says, "I will have to send a telegram." He jumped up. I think we got to about Tracy at that time, and he sent a telegram—at least I do not know whether he did or not. He went away and he did not come near me afterwards. I saw no more of Mr.

McNab until after the argument last Monday night. I was standing at the Capital Hotel bar, and one of the boys from the office come and told me there was a message for me at the office. I went to the office, looked all around, and saw nobody, and the boy says, "There is a gentleman upstairs wants you in room 62." I went upstairs, and whom should it be but Mr. McNab. He says, "Bunker and French want to turn State evidence, and they have been to the District Attorney to turn State evidence." I said, "Is that so?" He said, "Yes." He said, "Now, would you like to talk to Mr. Belshaw?" I says, "Not on this subject; not on this subject until I am positive what I am talking about. I still had in my mind that probably that was one of those bills; I had never seen it, but from the figures that my daughter put down on a piece of paper I thought that she had copied the bill that was in the envelope." "Well," he said, "you would not be afraid to talk to Mr. Belshaw, would you? He wants to talk to you." I says, "No, sir; I am not afraid to talk to anybody." "Well," he says, "I will tell him to come right in," and he went out of the door, and in a few minutes Mr. Belshaw came and knocked at the door.

MR. SIMPSON: Q. Now, just go on and state your conversation with Senator Belshaw. A. Mr. Belshaw came in, and I said to him, "A gentleman asked me if I had any objection to talking to you." I said, "I had no objection to talk to you." Mr. Belshaw says, "Yes, and I know what you are going to talk about," and looked me right straight in the eye. He says, "You are going to talk about a bill; you are going to talk about a Senator; you are going to talk about a Senator who gave you that bill, and the bill is in greenback on the Bank of Santa Barbara." I said, "You know more than I do, Senator. Did Mr. French tell you that story? If he did, he has told you more than I know." I was immediately aroused and stirred up on such a proposition; it was all a surprise to me, and I says, "I tell you, Mr. Belshaw, Mr. French did give me a fifty-dollar bill," and I related the circumstance to Mr. Belshaw the same as I did to Mr. McNab, but Mr. Belshaw opened the proposition to me, and told me that I had put it in an envelope and sent it home. I had no use for it in Sacramento at any rate, and I had never looked at the bill; done it through a careful—through the surrounding atmosphere, thinking perhaps I might know—any suspicion that it was one of those bills. Then, Mr. Belshaw said to me, "Mr. Kelly, you ought to, for the sake of the people of California, for your sake and my sake, and everybody else's sake, bring that bill before the committee; it is your duty." I said, "I do not know whether that is one of the bills or not, but I have no objection when I go to the city and get it, to come before your committee," and I says, "Will you have an executive session?" He says: "Yes, I will call an executive session next Friday." I says, "I have got to go to the city, and I will get the bill just as I sent it, and bring it up here." Mr. Belshaw then left the room. We talked about politics and about men generally, and I told him that as far as Mr. French was concerned, politically, I did not care about him. Twenty years ago he was elected to the Assembly, and he did not stay with his friends—went over to the other side, and things of that kind, and Mr. Belshaw left the room; he went out and then I went out. I never invited Mr. Belshaw to the room. It was done through Mr. Gavin McNab, and he did it without any invitation on my part. I naturally said, "I have no objection tot alking to Mr. Belshaw," but when Mr.

Belshaw came into the room he told me more than I knew myself. Then Mr. Belshaw told me before he left the room that he was going to the city. I says, "I will go to the city on Thursday, and be back here on Friday." I went to the city yesterday morning. I got in the city about 9 o'clock—

MR. SIMPSON: Q. (Interrupting.) Was that the first time since the Monday you spoke of when you had the conversation with Senator Belshaw? A. Yes, sir. I spoke to nobody since about the bill until yesterday.

Q. Did you telegraph or communicate with anybody in the city in the meantime? A. No, sir; I had no telegraph or anything else or no telephone. I went to the city yesterday morning. I got to my home at 9 o'clock—no, after 9—no, about 9, I think it was. I went direct to my drawer to get the bill, and get the thing just as it was put away, with the intention of seeing Senator Belshaw and showing him the bill. I took the bill and paper—the paper and bill were together just as it was when it was put away in my drawer like that. I have doubled that up since. I took the bill out for the first time and I looked at it. It is in the same position as when I sent it. [Exhibiting bill.] That is the way it was sent, and yesterday morning is the first time I opened it.

THE CHAIRMAN: Q. What is yesterday morning?

MR. SIMPSON: The 16th. Just read the number of the bill.

MR. RALSTON: Just get the serial number and the bank in the record.

MR. SIMPSON: Let the witness read the number of the bill and the bank.

THE CHAIRMAN: Q. Let the witness read it. A. Department Series C, 281,205, \$50 in gold coin.

MR. ROWELL: Gold note.

MR. RALSTON: United States Depository. What is the date?

MR. SIMPSON: Let the witness read that.

MR. RALSTON: What is the date on that, please? You will see it right on the top of the money there; you will find the date right up on the top. A. July, I think it is, the 12th, 1892.

MR. ROWELL: Yes, that is right—no, July 12, 1882. A. Yes, sir; it is 1882. I took the bill in the room by myself, and I took the paper—

MR. SIMPSON: Q. (Interrupting.) May I ask, as we go along; was this bill wrapped up like that? A. Yes, sir. That is the piece of paper I put it in the night I sent it away; I have the corresponding piece of paper here.

Q. When the bill was given to you it was not wrapped in that paper? A. No, sir; it was like this.

Q. You wrapped it and put it in that paper? A. No, sir; it was handed to me like that, and I never opened it; put it in the paper in the same position. I then looked over this paper, and I looked on the first list, and looked at the bill, and found that the bill did not correspond with this number. I immediately rolled it up, as it was before, and put it back in the envelope. I took it out in my library, the envelope and the paper, and I called my daughters, and I said, "Do you remember sending a paper and this envelope upstairs one day?"—

Q. (Interrupting.) Will you state what you did. Do not state any conversation you had with your daughter or anybody else. Just state what you did with the bill, if you wish. A. All right. I put it back

in the envelope, and took the paper, and put it in my pocket, and put this in my pocket at the same time. That is the same paper that I sent upstairs the morning that I told her to mark off that bill. I then ascertained that the bill that was marked numbered was the bill that was on the newspaper, and not the bill on the envelope. I asked my daughter why she did not open the envelope, and she said because it was marked "private," and she thought she would mark the number of the bill where the pencil indicated on the paper.

Q. Did your daughter write at any place the number of the bill that you had there? A. She said she never saw the bill at all; that she thought it had reference to the paper.

MR. RALSTON: Where did she write the number? A. In my library.

Q. On what piece of paper? A. On the sheet of paper lying in my library, and left it there until I came from my breakfast.

MR. SIMPSON: Have you got the paper she wrote it on? A. No; I tore the paper up, and put the number in my pocketbook at that time.

Q. Why did you tear it up? A. Because I did not want to carry a piece of paper with me, and put it down here.

THE CHAIRMAN: You say you asked your daughter why she did not open the envelope. Didn't you say you cut the end of it, and sent it up to her? A. Yes, sir; and she said she saw the word "private" on it, and did not look into it.

Q. I undertood you to say you asked her why she did not open it, and she said she saw it was private, and I understood you to say you had opened it by cutting the end of the envelope? A. Yes, sir; I cut the end off.

Q. Then the envelope was open? A. What I mean open is to take out its contents. She did not do that. Then, I immediately rang up Mr. McNab, and told him I was coming down to see him, and I went down and saw him, and I said, "I suppose now we are talking as attorney and client." "Well," he says, "we will talk confidential to-day, Mr. Kelly." I says, "All right; we will talk confidential." So, I started in and told him for the first time that I had taken this bill out of this envelope, and that the number that I had got was taken from the newspaper, and not from the bill. He immediately said, "Oh, that evidence is no good for us." "Well," I said, "I want to see Senator Belshaw." I says, "It is due to me that I should let him know just what the situation is that I discovered; I have not handled any other fifty-dollar bill in a year, only that one," and I says, "I want to find out where I can see Mr. Belshaw." I says, "I saw him going down the street a few minutes ago, but I wanted to see you first, and let you know the situation as an attorney." I said, "Where can I find him?" "Well," he said, "He lives at the St. Francis," but he says, "If you will go down to Fairfax Wheelan he can give you his telephone number." I says, "I do not know Fairfax Wheelan; I used to know his father some years ago." I says, "I will go down there, because I want to see him." I went down to Mr. Fairfax Wheelan, and asked him where your telephone number was, and he gave me your telephone number, and I wished him "good day"—it was raining very hard, and I went across the street and rung up your office, and they said you were out and would be back in about half an hour.

MR. SIMPSON: Q. You refer now to Senator Belshaw? A. I refer to Senator Belshaw, yes. I walked up Market street, and got to your

place in probably a little less than half an hour; it was raining very hard, and I was admitted to see Senator Belshaw. I started in to tell Mr. Belshaw what had happened, and Mr. Belshaw got very perturbed about the matter, and he says, "Mr. McNab is not your attorney," and he said it was not a confidential communication; and he says, "You told me that Mr. French told you to get that bill out of Sacramento as soon as possible," and he says, "I shall tell the committee so." I said, "If you will tell the committee that I said that, you will tell them what is not true; I never said it to you." I said, "I could not say it, because Mr. French never said those words to me, and I could not say it, and I won't tell a lie for you or anybody else," and he says, "Mr. McNab and I will tell that committee that you did say so," and Mr. Belshaw and I—

THE CHAIRMAN: Q. (Interrupting.) Did I say Mr. McNab and I would tell the committee? A. Yes, sir.

Q. Or, did I not say Mr. McNab and I would testify before the committee? A. No sir; you said Mr. McNab would say so, and you said that he was not my attorney.

Q. I do not care to discuss that with you. A. We discussed it for an hour yesterday afternoon.

MR. RALSTON: Let us get the evidence down, and we will be the judges.

Q. Is that all there is to it? A. That is all there is to it.

MR. SIMPSON: This will be cross-examination.

Cross-Examination.

THE CHAIRMAN: Q. Did you not say to me in room 62, in the Capital Hotel on Monday evening, February 13th, about 12 o'clock at night—somewhere in that neighborhood—during our conversation, did you not say to me that you did not want to talk to me as a legislator? A. After you told me, sir—

Q. Answer that question yes or no. A. I say after—

Q. I say answer my question yes or no. Did you not say to me—read that question again, Mr. Reporter. A. (After question read.) I did say this: I did not want to talk to you as a legislator until I knew positively what I was talking about.

Q. Did you not say to me—did you not ask me this question, at that time and place, "Are you a Mason"? A. I did.

Q. Did I not reply that I was? A. Yes.

Q. Did you not say to me at that time and place that Mr. French came to you on the evening that the "Bulletin" came out—that Monday evening, January 30th—met you as you were coming across, as I remember it—you said you were coming across from the Golden Eagle Hotel; walked down the street with you, and say to you that he had heard that the District Attorney was going to get out a search warrant, and search them, and that he handed you what he said was a fifty-dollar bill, and told you to get it out of Sacramento? A. No, sir; he did not.

Q. Did you not tell me so? A. I did not, sir; never uttered those words to you; I could not say it, and I—

Q. (Interrupting.) Did you tell me anything that I have included in that last question? A. Ah! Yes, sir. I never said that Mr. French

said to get it out of Sacramento. I never could say it. The man never said it to me, and it would be impossible for me to say it, because I won't lie about it.

Q. Did you not say to me in the Capital Hotel, room 62, on the evening of February 13th, about 12 o'clock at night, that a friend of yours had seen the bill? A. I said I presume a friend of mine had seen the bill.

Q. Did I not at that time and place ask you this question, "Was it one of the bills mentioned in the 'Bulletin'?" A. No; you told me it was.

Q. Did I not ask you that question? A. No, sir; you never did.

Q. Did you not in answer to that question at that time and place say to me, "Yes; it was"? A. No, sir; I never did.

Q. Did you not agree with me to come before this committee in executive session on this day, Friday, February 17th, at 1 o'clock, and testify under oath and make the same statement that you made to me at that time and place; that is, in room 62 of the Capital Hotel on February 13th at about 12 o'clock at night, between 12 and 1, and bring with you the bill? A. No, sir; I did not make that statement to you in that way. I promised to come before this committee under the statement that I have already made in my statement here that is on record. If you will read it you will see how I came here.

Q. Did you not, at that time and place, referring to the room in the Capital Hotel, and so forth, as in the previous question, when I asked you if you would come before the committee and testify the same as the statement made to me, and bring the bill, did you not say you would prefer to sleep over the matter, and give me your answer in the morning? A. I said I would prefer to sleep over the matter and be positive I knew what I was talking about.

Q. Did you not finally, after my urgent solicitation, and after, as you have stated, I had told you it was your duty to the State, and so forth and so on, and after I had made an appeal to you, did you not agree to come before this committee and testify as I have stated? A. I agreed to bring the bill that Mr. French gave me before this committee.

Q. And testify as you had stated— A. (Interrupting.) And testify as I have testified to-day.

Q. As you told me? A. Not as I told you what I knew, because I did not know as much as you knew; so, do not consider it that way.

Q. Did I not shake hands with you, and thank you for it, and say that you were doing a great service to the State? A. You said, when you got me to consent to come before the committee, you shook hands and thanked me, but you thanked me more so because I thought you were a straight man.

MR. ROWELL: Is that the bill Mr. French gave you? A. Yes, sir, positively; no other way for any other bill to be there; it could not be changed; my house has not been burglarized, and been in the same place.

THE CHAIRMAN: Q. And you saw me on Monday night or Tuesday morning; it was early Tuesday morning when I left you; it was after 12 o'clock? A. Tuesday morning.

Q. It was about 1 o'clock? A. I think it was; probably half past 1 or a quarter to 1.

Q. It was about 1 when I went across. A. It was pretty near that when I met you.

Q. It was about a quarter of 12, but it was about a quarter of 1 on Tuesday morning when I left. A. At that time you must remember I did not meet you through any appointment of mine or any engagement; it was through enticement—inveiglement—that we met.

Q. I am not talking about that at present, but first answer this question if you can: Did you, between that time that I left you and the time that you saw me in my office in San Francisco yesterday—did you telephone to anybody in San Francisco that you wanted to see me before I returned to Sacramento; did you telephone from Sacramento? A. No, sir; I did not. I telephoned to Mr. McNab on—what was yesterday, Thursday?

Q. Yesterday was Thursday? A. On Wednesday afternoon I intended to go to the city to get this bill, and meet you and Mr. McNab, and show you what I had, and waiting for the telephone message I got late for the train, and I could not go, and when Mr. McNab's man telephoned I said: "You tell Mr. McNab that I intended to be down to-night, but I could not get there to-night on account of waiting for your phone, but I am coming down the first thing in the morning," and I said I intended to have that man there that I talked to on Sunday night. That was it.

Q. On Sunday night? A. That I talked to on Sunday night. Mr. Belshaw promised to call the committee together, and I promised to show him the bill—show the committee the bill, and I wanted to show it to Mr. Belshaw—if it was any of those bills that was marked in the "Bulletin" I wanted him to see it, and it was in good faith; if it was any of those bills he should see it.

Q. Then you did telephone down that you wanted to see me before I came back to Sacramento? A. No, I did not say that; no, sir.

Q. Didn't you telephone to Mr. McNab, or send a message to him so that you wanted to see— A. (Interrupting.) No; I told him to have the other man there.

Q. The other man, meaning me? A. That is what I meant.

Q. Yes? A. Yes, sir.

Q. Didn't you send a message that you wanted to see me before I came back to Sacramento? A. It was not absolutely necessary; I knew you were in the city.

Q. Answer yes or no. A. What?

Q. As a matter of fact— A. (Interrupting.) I intended to see Mr. Belshaw before he came back to Sacramento, because I wanted to know about what way and in what way he wanted to examine me in the committee, but when I got this note yesterday and showed it to you you flew at me as though I was the biggest rascal on earth, and I could not talk to you about this committee, and I said I would be there all right.

Q. Did you not say to me in room 62 of the Capital Hotel on Monday evening, February 13th, at about 12 o'clock, in the course of our conversation—did you not say to me or ask me if you could not see me in San Francisco Thursday? A. I told you I would go down and get the bill.

Q. Didn't you ask me if you could not see me in San Francisco on Thursday? A. I do not remember asking you that, whether I could see you or not.

Q. And did I not say to you I did not see any necessity for you to see me, that you would be before the committee on Friday, and make your

statement, and have the bill? A. No, sir; you never said anything of the kind, Mr. Belshaw; oh, no, you never said anything of the kind.

Q. You had that bill in your possession or under your control from January 30th until the 16th day of February? A. Under my control—it was locked up in my house from the——

Q. (Interrupting.) From the 30th day of January? A. No; from the 1st day of February.

Q. You got it on the night that the "Bulletin" came out; that was January 30th? A. It went through the mail to my house in an envelope.

Q. You first got it on January 30th? A. Yes, sir.

Q. Then you did not look at the bill until the 16th of February? A. I never looked at it until yesterday morning—never looked at it, and I took that caution, that I would not look at it; I had suspicion that it was one of those bills, and I did not want to be dragged into that thing, because I did not need to look at it.

Q. If you had looked at it when you first got it, and had found out it was not one of those bills, you would not have been under the necessity of sending it away? A. Yes, sir; just the same thing, because I had all the money I wanted in my pocket, and I am not carrying fifty-dollar bills around with me.

Q. Did you not state to me in our conversation in room C2 of the Capital Hotel on Monday evening, February 13th, at about 12 o'clock at night, that you believed that I was honest and endeavoring to get at the truth of the matter in this investigation? A. Yes, sir; I did so.

Q. And that you had some evidence that you thought might help me? A. No, sir; I did not say anything of the kind. I said I thought you wanted to get at the truth of this investigation, but I never told you that I had any evidence that would help this committee, because I did not know it, and I would not say that without I was positive.

Q. Words to that effect? A. No, sir.

MR. RALSTON: Q. Mr. Kelly, you have known Mr. French for a long time? A. About twenty years, I guess, or a little over.

Q. You and him have had business transactions together? A. Only in politics. I have given him money lots of times.

Q. You have loaned him money? A. Yes, sir.

Q. The fact of his coming to you to pay to you some of the money loaned—how much does he owe you? A. Oh, he owes me several thousand dollars.

Q. Several thousand dollars? A. Two or three thousand dollars.

Q. Then, the fact of Mr. French coming to you and giving you a bill, and telling you that it was a fifty-dollar bill—you took that absolutely for granted? A. No, sir; he told me, "Here is fifty dollars, Kelly, and I will give you more when I get it," and I will tell you how that came about.

Q. One moment please. Let me ask you questions in my own way. You keep books, do you not—accounts of friends owing you money? A. Not against my friends; no, sir.

Q. Not against your friends. You testified a few moments ago that French was no friend of yours? A. Politically so, I don't consider it so.

Q. That is the only connection that you have had with him, politically? A. That is all; I advanced him money politically.

Q. He is not a friend of yours as a matter of fact? A. I do not consider him as a friend of mine.

Q. When a man hands you a bill, and tells you it is a fifty-dollar

bill, do you mean to say, Mr. Kelly, that you do not have the curiosity to see whether the man was paying you a fifty-dollar bill or a five-dollar bill? A. No, sir; I did not.

Q. Are you in the habit of receiving fifty-dollar bills? A. Yes, sir; not lately; I have not received fifty-dollar bills, but I have received higher—as high as \$5,000 bills.

Q. You testified a moment ago you had not had any fifty-dollar bills for a year? A. Not for a year.

Q. Then, you were not curious at all? A. Not at all, under the circumstances.

Q. And you took the man's say so for it, although he is an enemy of yours? A. As far as that is concerned, I would take his say so; I would lend him money to-morrow; I would take his word for it. When I consider a political friend, I have a distinction between my entire friendship for a man and political friendship—

Q. (Interrupting.) We won't take time to define that. The point that I am trying to make is this: that you are in the habit of receiving money for the payment of debts owed you, without looking to see whether that is the correct amount or not, are you? A. Yes, sir.

Q. You would? A. Yes, sir.

MR. RALSTON: That is all I want to ask you.

MR. SIMPSON: Q. Mr. Kelly, you began your testimony practically by a statement of a conversation which you had with Mr. McNab. A. With business transactions.

Q. Yes, sir. Is your statement here to-day of the conversations which you had with Mr. McNab absolutely true and correct? A. Just read it over.

MR. SIMPSON: I will withdraw the question for a moment.

Q. You admit that you saw Senator French on the evening of the 30th of January in Sacramento? A. I saw him several times during that evening, coming along the street. I spoke to him twice.

Q. When he handed you this bill, was it in an envelope or loose? A. It was just as I showed you, doubled up in that square, and he handed it to me just as it was.

Q. Where were you when he handed it to you? A. On the sidewalk walking down K street.

Q. And where on K street? A. I should judge about Sixth street—between Fifth and Sixth.

Q. And when you met Senator French, which way was he going, towards you, or— A. (Interrupting.) I was crossing the street going towards the Capital Hotel.

Q. Did he come up and accost you? A. He was right in front of me, and said he wanted me a minute. There was another gentleman with him.

Q. What then did he say to you? A. He said, "Walk down the street."

Q. And you walked down the street together? A. Yes, sir; he said he had heard rumors about their arrest and warrants, and Gavin McNab was trying to get warrants for them, and I listened to that. That was all.

Q. Up to this time you say Senator French was not a friend of yours? A. Oh, yes, he was a friend of mine in this way: I will tell you, I felt a little sorry for French in this way. I asked him for I felt—an appoint-

ment, and he did not give it to me. I said to him—I said, “French, I have done you lots of favors, and I have let you have lots of money; don’t you think there is something coming back to me?”

Q. This was some time ago? A. No; this was about a week before that. He said, “Yes, Kelly; there is something coming back to you, and I will pay you when I get it.”

Q. Go on with your conversation this night. A. I felt very sore towards him, and spoke to him very straight on that point.

Q. This conversation on this night when you met him on the 30th day of January, I mean. A. He did all the talking.

Q. What did he say; go on and state it? A. “I know they are going to get warrants out for their arrest,” and he said, the object was he thought to search them. That was his remark to me.

Q. He said to you during that conversation—— A. (Interrupting.) Yes, sir.

Q. ——that he expected them, in substance, to search him? A. Then, I said to him——

Q. (Interrupting.) Is that right or not? A. No.

Q. You just testified. A. To search them. He did not say whether the warrant was for me or them. I supposed it was for the four Senators.

Q. To search them at that time? A. Yes, sir. He said, “Can they arrest us and search us,” and I said, “I don’t think they can.”

Q. That was before he gave you the bill? A. No, sir; he had handed me the bill before that.

Q. How soon after he met you did he hand you the bill? A. We had not walked forty yards from the Capital building before he handed me that bill.

Q. From the Capital Hotel? A. From the Capital Hotel.

Q. What did he say when he handed it to you? A. He says, “I want to tell you something,” and then started in telling me what you have just heard, and says, “Here is fifty dollars, Kelly, and I will pay you more when I get it,” and then he says, “I heard something else up the street,” and I says, “What is it?” and he started in to tell me what he heard.

Q. How much did French owe you on the 30th of January? A. How much did he owe me?

Q. Yes. A. It was over \$3,000.

Q. Money loaned? A. Yes, sir; money advanced to him.

Q. When is the last time you ever made any advance to him of money? A. It is two years.

Q. Two years? A. Yes, sir.

Q. Whereabouts? A. In San Francisco.

Q. How much? A. A thousand dollars.

Q. For what purpose? A. During that year I advanced him——

Q. (Interrupting.) A thousand dollars two years ago in San Francisco? A. Yes, sir.

Q. In cash? A. Yes, sir.

Q. By check? A. No.

Q. Cash? A. Cash—currency.

Q. For what purpose? A. For election purposes.

Q. Was he a candidate for office? A. Not then. He may have been a candidate, but he was not nominated.

Q. Was he making a canvass at the time? A. Oh, doing politics for a year there.

Q. Were you affiliated then, or interested in his campaign at that time? A. Yes.

Q. You were. Did you give him any note? A. No, sir.

Q. Gave you no evidence of that indebtedness? A. No, sir; only his word.

Q. Personal loan, was it? A. I gave it to him as a personal loan.

Q. Was it your own money? A. Yes, sir.

Q. Has he paid anything on account of that since? A. He has not been able to; he has made several excuses to me on that.

THE CHAIRMAN: Q. Except this fifty dollars? A. I was talking about two years ago.

Q. Before that time, what money did he owe you? A. During that year?

Q. Before the time you loaned him the two thousand? A. I loaned him a thousand dollars away back in July, in 1902.

Q. Did he ever pay any part of that? A. He did not.

Q. Did he ever give you any note or other evidence of the indebtedness? A. No, sir.

Q. Has he given you any security for either of these loans? A. I did not ask him for any.

Q. He gave you no security? A. I did not ask him for any.

Q. Well, did he give you any security? A. No, sir; he did not.

Q. That is what I want. For two years then he has owed you as much as \$2,000? A. Yes, sir; more than that.

Q. Did he ever render you any service or ever do anything in the way of payment or otherwise to discharge that obligation? A. Well, I asked him to—

Q. (Interrupting.) You can answer that question by yes or no, and explain it. A. I did not.

Q. You mean he did not? A. What do you mean?

MR. SIMPSON: Repeat the question, Mr. Vaughan. (Question read.) A. Nothing in the world, but paid me fifty dollars the other day; nothing in the world has he ever rendered me.

Q. What did you do with that fifty-dollar bill when you got it from him? A. I have already stated.

Q. I want you to take up the narrative again. You have stated you conversed with Mr. McNab. What did you do with the fifty-dollar bill? A. I put it in my pocket; in this pocket.

Q. And you kept it in your pocket until you went to San Francisco? A. No, sir.

Q. Mailed it to San Francisco? A. I went over to the French Restaurant.

Q. In this city? A. In this city. I had been writing some letters in the Law Library, and I got a half a dozen envelopes, and a few sheets of paper from the Sergeant-at-Arms' room upstairs.

Q. From what Sergeant-at-Arms? A. Senate Sergeant-at-Arms.

Q. Do you know the man's name? A. McCall.

Q. An Assistant Sergeant-at-Arms? A. Yes, sir; I got it in the afternoon. I went into the Law Library, and wrote my letters, and I put about three of those envelopes in my pocket, and it is a Senate envelope

that I put on the outside, and a Senate envelope on the inside, and mailed it on K street to my address in San Francisco; I am not certain what part of K street; I came out of the French Restaurant and had the envelope in my hand; did not put it in my pocket; am not in the habit of putting letters in my pocket, and walked down the street, and put it in one of the boxes—I do not know which one.

Q. You went into the restaurant and had the bill in your pocket?

A. Yes, sir.

Q. And had some of these envelopes in your pocket? A. Yes, sir; I had three of them.

Q. Put the bill in one of the envelopes? A. Yes, sir.

Q. And you sealed that envelope up? A. Yes, sir; here is the envelope.

Q. Did you make any writing on it? A. I wrote "private" on it.

Q. What did you do with that? A. Put it in another.

Q. Addressed where? A. "Martin Kelly, 313 Fremont street, San Francisco."

Q. Did you stamp it at that place? A. I put on a stamp, yes, sir; I got some stamps.

MR. ROWELL: Let me see that envelope.

(Envelope handed to Mr. Rowell.)

MR. ROWELL: That is all straight.

THE WITNESS: It is absolutely as I tell it.

MR. SIMPSON: Q. How long did you have the bill between the time when you got it from French, and put it in this envelope and sealed it up? A. May have been an hour or so. I sat in the French Restaurant, and had a bottle of beer and read the "Bulletin."

Q. At what time was it that you went into the restaurant—
A. (Interrupting.) It was some time in the evening.

Q. —to fix this letter up? A. I could not tell you the exact time. It was no dinner, because I was not hungry; I was more thirsty than hungry at the time.

Q. Did you go into the restaurant expressly for the purpose of fixing this up, or dining? A. I went in there to get a glass of beer and read the "Bulletin." The "Bulletin" was in my pocket, and I sat there and read the "Bulletin," and had a small bottle of Budweiser beer.

Q. How long had you had the "Bulletin" in your pocket? A. I bought it and put it in my pocket.

Q. You bought it about the time that the special "Bulletin" came up that afternoon? A. I think I did; yes, sir.

Q. And you had this "Bulletin" at the time you mailed this letter?
A. Yes, sir; but I had not read it.

Q. You had not read it until after you mailed the letter and fixed it up? A. I read the "Bulletin" before I sent the letter.

Q. Did you read in the "Bulletin" about the marked bills? A. Yes, sir; and that was why I did not look at it; that was one of the reasons.

Q. Because you did not want to know what was the truth? A. Because I wanted to find out more about the investigation, if there was anything about it.

Q. When it came to comparing the bill with the list in the "Bulletin" which you then had, your heart failed you? A. No, sir; no, sir; don't you ever think anything of that kind; never thought of that at all. I looked at it more from my own personal reputation than mixing

up in such a thing. I did not believe the "Bulletin," and I do not believe it yet.

Q. I understand you to say that you did not want to look at the "Bulletin"; that you did not want to know about this thing? A. No, sir; I did not.

Q. And that is why you—— A. (Interrupting.) I want to know everything that is going on if I can.

Q. And that was the reason why you did not compare your bill with the list in the "Bulletin"? A. No, sir; no, sir; that was not the reason at that time. I did it naturally. I did it naturally. I did not want to find out—had no desire to look at it. I did it as a mere matter of careful caution; like everybody else I had a suspicion that there was something in the air, and did not want to look at it.

Q. That afternoon, when the "Bulletin" came out, and you had read it, you knew that there was a suspicion about this affair, on these men? A. It looked bad.

Q. One of them had come to you and handed you a bill that evening. Do mean to say that when you addressed this letter that you overlooked—that you forgot to make a comparison, or that you intentionally omitted to do so, because you did not want to gain any knowledge that might come to you? A. I did not want to gain the knowledge at that time.

Q. Then you had an idea in your mind at the time you mailed this letter that you did not want to compare this bill with the "Bulletin" list? A. There may have been that kind of an idea in my mind.

Q. Can you say? A. I cannot say what my mind was on that point; I had not come to any conclusion.

Q. Well, did it require a conclusion to keep you from doing it? A. It does require me to come to a conclusion before I act.

Q. Were you not deeply interested at that time in this scandal which had arisen that day? A. Not deeply; no, sir.

Q. You have been in attendance on this Legislature practically since it opened, and watching the business of the Legislature? A. Not very close with it.

Q. You are not personally acquainted with these men that are charged here? A. Not personally, any more than I am acquainted with you.

Q. Will you give the best explanation you can, to the best of your recollection, of the reason why at the time you mailed this bill, with the "Bulletin" in your pocket, having read it——

A. (Interrupting.) I had not read it at the time I wrote my letter.

Q. How long had you had it in your pocket? A. The first thing I did in the French Restaurant was to address the envelope.

MR. SIMPSON: Repeat that question.

(Question read.)

MR. RALSTON: Q. Can't we have that envelope; is there anything in it? A. There is the fifty-dollar bill in it.

Q. You better take the fifty-dollar bill out and let us have the envelope?

THE CHAIRMAN: Q. What kind of a stamp did you put on the envelope?

A. Two-cent stamp.

Q. Was there any other kind of stamp? A. No, sir.

Q. Was there an immediate-delivery stamp on it? A. No, sir.

MR. SIMPSON: Q. Did you at any time state to Senator Belshaw either

in room 62 of the Capital Hotel on the 13th of February or anywhere else that you had sent this letter with an immediate-delivery stamp on it, addressed to you in San Francisco? A. No, sir. At that time I said I immediately wrote a letter—

Q. (Interrupting.) Just one moment, and make your answers as responsive as you can, Mr. Kelly. Repeat the question. A. (After question read.) No, sir; I never did. I said that I immediately went to the French Restaurant and got a bottle of Budweiser beer. I addressed the letter myself, and put a two-cent stamp—

Q. (Interrupting.) One moment. I do not care what you said to him in other respects at this time. I want you to answer the question about the delivery stamp. Did you say that you had mailed this letter to yourself with a special-delivery stamp on it? A. No, sir.

Q. To Senator Belshaw on either of these occasions? A. No, sir.

Q. After mailing this letter to yourself, when was the first time that you communicated with any one in San Francisco or went there yourself? A. The first time was on the 1st of February. I sent a special delivery letter on Monday at 2 o'clock.

Q. What day of the month? A. On the 30th of January.

Q. Addressed to whom? A. Addressed to Miss Alice Kelly.

Q. In San Francisco? A. Yes, sir; at 313 Fremont street.

Q. At what time did you mail the letter? A. Somewhere about 11 o'clock—2 o'clock, I guess.

Q. In the afternoon? A. Yes, sir; with the letter inside. I wrote it in the Law Library.

Q. Personal letter? A. Personal letter addressed to D. V. Sullivan, and sealed, and a personal letter to Miss Kelly to have that letter delivered to Mr. D. V. Sullivan, and tell him to have \$3,000 for me on Wednesday—that I would be down to get it. He owed me \$3,000, and I was there for that purpose. That was my business there. My daughter delivered the letter to Mr. D. V. Sullivan.

Q. Where did you mail that letter? A. In the postoffice.

Q. Directly in the postoffice? A. Yes, sir; got a special delivery stamp.

Q. At what time? A. I think it was about 2 o'clock in the afternoon.

Q. Was it later than 2? A. I would not be sure, but the letter was delivered that evening, because—

Q. (Interrupting.) In San Francisco? A. I think so, because my daughter told me she had delivered the letter to Mr. Sullivan the next morning, and when I got to San Francisco on Wednesday morning or Wednesday noon, I was in a hurry to go and see Mr. Sullivan about that money.

Q. I am not devoting myself to that subject, Mr. Kelly. At what time in the evening did you put the envelope containing this bill in the mail-box in this city? A. Oh, it must have been 9 o'clock, I guess—8 or 9 o'clock.

Q. You went to the city on the 1st of February, did you? A. Yes, sir.

Q. When you got home, did you see the envelope—the letter which you had addressed to yourself? A. It was with other letters. It had been saved there until I got home.

Q. Did you open this letter that was addressed to you? A. I opened all the letters first, and tore off the envelopes and read my letters.

Q. And you opened this letter? A. I did; yes, sir.

Q. By cutting off the end with a knife? A. No; I opened the outside of the envelope.

Q. Tore that off entirely? A. Tore that off entirely, and took this one out. My pen-knife was out on the table that I had been opening the other letters with, and I took this one and cut the end off it.

Q. Did you take out the contents. A. No, sir.

Q. What did you do with that? A. Lay it on the table. My daughters were getting my breakfast ready, and when they got my food on the table I laid the letter to one side.

Q. This was at your breakfast table? A. Yes, sir.

Q. On the morning of the 1st of February? A. This was noon; I never got home until about noon.

THE CHAIRMAN: Q. The train was late? A. Yes, sir. And I sat there eating——

MR. SIMPSON: Q. (Interrupting.) Let me bring this out on cross-examination. I do not want all your statement over again. What did you do with that letter? A. I threw the envelope down and laid the inner envelope on the table.

Q. Laid the inner envelope which you had cut open with a knife? A. Yes, sir; laid it there on the table.

Q. What did you do next? A. Got the "Bulletin." It was laying in a little corner where they keep papers, and I says, "Give me the 'Bulletin,'" and the young man handed me the "Bulletin" there, and I read the "Bulletin." I was eating and reading it and sat there, and the girls went upstairs.

Q. Your daughter you mean? A. I have several. I said, "George"—the young man who is married to one of my relations and lives in my house, and when he is out of work does a little chores around the house—I says, "George, take this bill"—no, I says, "Take this up to Alice," and I says, "Tell her to give me the number of that bill."

Q. Take what up? A. The envelope. I did not want to say to him. I thought he would understand enough to give her the envelope.

Q. Who was Alice? A. One of my daughters.

Q. She was there at the time? A. Yes, sir; she was in my library.

Q. Were there any other members of your family besides Alice and the young man you designated as your son-in-law in the house at that time? A. Yes, sir; five or six of them.

Q. Who were in the room at the time you were talking to George? A. Only George.

Q. And you told him to take this inner envelope up to Alice? A. Yes, sir. He did not know what was inside that envelope at all.

Q. I am not asking you what he knew about it. George who; what is his full name? A. George Peckham.

Q. You said, "George, take this envelope up to Alice?" A. Yes, sir.

Q. Continue. What else did you tell him? A. I said, "Tell her to look over this and give me the number of that bill." I says, "Hold on; I will tell you where to look," and I put my pencil around the paper.

Q. You had the "Bulletin" before you at that time? A. Yes, sir; this was the "Bulletin," and I have always been in the habit——

Q. (Interrupting.) Do not talk about habit. Say what you did. A. I put my pencil mark around there, and I says, "George, take this upstairs, and get Alice to look over this, and give me the number of that bill."

Q. What did you give him? A. I gave him the paper like that.

Q. What paper? A. This "Bulletin" and that.

Q. And the envelope? A. Right here. This is the very thing I gave him.

Q. That is, this issue of the "Bulletin"? A. That issue of the "Bulletin."

Q. Of the 30th of January? A. I have not looked at even the date of it, but I guess it is.

Q. Containing list of bills? A. Yes, sir.

Q. And this is the envelope marked "private"? A. Yes, sir.

Q. One end of which you cut open with a knife, and in it was the bill? A. Yes, sir; it is in there now.

Q. You told him, "George, take this envelope and this paper up to Alice"? A. I says, "Take that up to Alice, and put down the number of that bill on a piece of paper," and I put that on there like that, and I thought probably she could understand.

Q. What did he do? A. He took it up to her and told me yesterday morning he laid it on the table——

Q. (Interrupting.) I do not want what he told you. A. He took it away from me, and took it upstairs. That is all there is to it.

Q. Did he come back and say anything to you? A. No, sir.

Q. How long did you remain in your residence then? A. I did not remain very long after I got through eating.

Q. About how long? A. I left there probably about 1 o'clock.

Q. Well, how long were you there—about an hour? A. Oh, probably over an hour; I guess it was over an hour.

Q. Didn't you see your daughter Alice after you sent this bill to her? A. No, sir; she was doing her work in the other room, and the sheet of paper was laying there——

Q. (Interrupting.) One moment, please. Answer my question and confine yourself to the answer. Your daughter Alice did not give you the number of that bill at that time? A. She wrote it on a sheet of paper.

Q. Did she send the paper or bring it to you, or did you go to her to get it? A. I told George to tell her to leave it on my desk in my library.

Q. Did you go to your library while you were there at your residence on that occasion? A. Afterwards; after I got through eating I went up into my library.

Q. Did you find any paper with the number of the bill written on it? A. I found a blank sheet of paper with the number of this bill here written on the top of this piece of paper.

THE CHAIRMAN: Q. The first bill on the list? A. The first bill in the list, with my pencil-mark here.

MR. SIMPSON: Q. By the bill? A. Yes, sir.

MR. RALSTON: The first bill on the list?

MR. SIMPSON: Q. When you found that paper, with the number of the bill written on it, did you ask to look at the "Bulletin" to make any comparison yourself? A. No, sir. I did look at the "Bulletin" myself.

Q. On that occasion? A. Yes, sir.

Q. And made comparison with the number she had given you? A. I looked at the paper, and I took out my book here——

Q. (Interrupting.) Did you make a comparison? You can answer that question. A. What do you mean by comparison?

Q. Did you compare the number which she gave you, written on that paper with the list in the "Bulletin" on that occasion? A. No, sir; I did not. I looked over the "Bulletin," and I saw the number on this paper that I had already read in the "Bulletin" before. I had read that and I looked over the paper, and saw this number on that sheet of paper.

THE CHAIRMAN: Q. Then, as a matter of fact you compared, did you not? A. If that is what you mean by comparing it, I did look over it.

MR. SIMPSON: Q. Up to the time that your daughter left this slip of paper with the number of the bank note on it, you had not any information at all as to the number of this bill? A. No, sir.

Q. When you read it on the slip of paper where your daughter had written it, that was the first knowledge you had of the number of the bill? A. I had an impression—

Q. Is that the first knowledge you had of the number of the bill? A. Of which bill?

Q. Of the bill you mailed to yourself? A. I did not have any knowledge then, except from what I read, I admit.

Q. You assumed that your daughter had correctly written that there? A. Yes, sir.

Q. Then, did you not then and there make a comparison with this "Bulletin" or any "Bulletin" containing a list of bills? A. I don't think I did after I took that paper up. I read the "Bulletin" before that, and I took that paper up, but I may have afterwards. I put it in my pocket-book, the number, and I may have looked over the paper, but I do not remember.

Q. You do not know whether or not at that time, or during your stay at your residence that day, you compared the number on the slip of paper with any of the numbers given in the "Bulletin"? A. I do not remember that I did that day.

Q. You cannot say whether you did or not? A. That day I cannot remember, but it is probable that I did.

Q. When did you? A. I have an impression in my mind that I did.

Q. What did you do with this piece of paper? A. Tore it up, and put the number down in my own handwriting in this book.

Q. Why did you tear up a slip of paper written by your daughter and transfer it to your own book? A. I could not tell you why I did it.

Q. Any idea of precaution about it? A. No, sir.

Q. Can you tell why you tore up the sheet of paper and wrote it in your memorandum? A. I cannot say, only outside of the cautious way I have of doing.

Q. When did you do that? A. I think I wrote it right there and tore the paper up.

Q. Sitting at your desk? A. Yes, sir. I copied it there and wrote it down in my book.

Q. You have made a statement about this, and I want to ask you some questions. You can not say whether or not you compared the number written by your daughter upon the slip of paper and transcribed by you into your notebook— A. (Interrupting.) On that occasion—

Q. (Interrupting.) Wait until I get the question. (Question read.) You would not say whether you made such a comparison at that time

with the list in the "Bulletin"? A. I can say, not with the list, but that this very bill on top of here I copied off of what she wrote, and put it in here.

Q. And the number written by her is the same number? A. And the number written by her is the same number there.

Q. And you verified it on that occasion? A. I put it in my book.

Q. Where was the bill at that time? A. Right there in that envelope as it is now.

Q. Right in front of you? A. Yes, sir; and I surmised——

Q. (Interrupting.) Never mind what you surmised. I want you to be fair. A. I am willing to be fair.

Q. The number that your daughter wrote on the slip of paper is the same number as was at the top of the "Bulletin"? A. Yes, sir.

Q. And you verified that much at that time? A. Yes, sir.

Q. But the note was laying before you on the desk? A. Yes, sir.

Q. You did not take the bill out of that envelope to verify that starting information? A. No, sir; I did not.

Q. Mr. Kelly, how do you explain that? A. Because I had a shrewd suspicion that I wanted to see how far this investigation was going, and if there was any crime, for me to keep it; at the proper time I was going to attend to it.

Q. You did not care to know the facts? A. I did not care to know the facts at that time.

Q. That is a fact? A. I did not care to know, and did not want to know.

Q. Why didn't you want to know at that time? A. Because I did not want to know at that time.

Q. Would your knowledge of the contents of that envelope containing the bill put you in any different position with reference to this investigation than you are now? A. It may have put me in a better position.

Q. Why? A. Because it never bothered me about the bill at all, until those men were indicted, and then I commenced to see whether I was committing any crime if I had any evidence that was in my possession, and that is one of the reasons I talked with Mr. Gavin McNab as an attorney. If I was committing any crime I wanted to know it. If I had any evidence in my possession I was going to take proper care of Mr. Kelly.

Q. Mr. Kelly, after you had made the comparison with the number your daughter wrote and the number on the paper, how long was it before you communicated with Mr. McNab? A. Well, I came back to Sacramento that afternoon—that evening.

Q. Was Mr. McNab up here at that time? A. I don't know.

Q. Do you know whether he was in San Francisco? A. Let me see. He was here on Tuesday evening, and I went down the next morning, but I did not get a chance to see him.

Q. Coming back to the time when you were seated in your dining-room about to dine, with this envelope in front of you, just before you told your son-in-law to take it up to your daughter, why did you tell him to take it up to your daughter to get you the number of it when you had it in the bill laying before you in an envelope? A. Because I was eating and wanted to save time. I had a great deal to do, and I did not want to talk to George about my business. I do not talk to him about my business.

Q. Is it not a fact that you suspected at that time that that bill was one of the marked bills which had been listed in the "Bulletin," and you did not want to gain the certain knowledge that it was, and for that reason you sent it up to your daughter? A. I can not say that I had any direct suspicion, but there may have been a cloud in my mind, and a cautious way of acquiring my knowledge that I did not want to know, in case there was anything of the kind there. That is all—only my cautious way of acquiring that kind of knowledge.

Q. Did you believe at any time it would be better for you not to know of your own knowledge of the number of this bill, because you might in some way become incriminated if you knew? A. No, sir; not incriminated. I do not want to be connected with any question of those scandals. It looked to me as if there was something rotten about it, and I wanted to see whether this was a legitimate case of bribery or not.

Q. Have you not thought all along in regard to this investigation, since this charge was made, as a good citizen, it would be better for you to be in possession of the facts personally—that you could get in your possession? A. I did, certainly.

Q. That has been your— A. (Interrupting.) I intended if this was a straight investigation, if any crime had been committed, if I had anything that would lead towards the enlightenment of this committee or any court, that I would bring it forward.

Q. And yet, with that knowledge and that attitude towards this investigation you willfully omitted to look at that bill to get the number of it? A. No, sir; I would not say that I willfully omitted.

Q. Why didn't you? A. Because as a matter of my business I do not do things willfully; I do them in a careful way, and to help me along as quick as I could.

Q. Your business is that you like to get at all the facts and knowledge of anything? A. That depends on how much time I got. If a thing has to be done in a certain time I try to get through as quick as I can, and if it takes more time for me to acquire my knowledge I take more time about it. I am the judge about it.

Q. Now, Mr. Kelly, in a connected way, to the best of your ability, and as concisely as possible, will you please explain to this committee why you sat at your desk in your residence with the "Bulletin" before you containing a list of these bills and a slip of paper upon which your daughter had marked the number of this bill, after having yourself compared that number and ascertained that it was the same number as one of those given on the list, and with the bill itself before you in an envelope, why you did not look at the bill in the envelope itself, and ascertain whether this number was the same as the number in the list of the "Bulletin"? A. I will tell you why.

Q. If you want that question repeated, I will have the reporter repeat it. Just repeat the question. A. Because I knew if there was anything wrong about that bill, I had time enough in my judgment to find it out.

Q. Is that the best and fullest explanation you can give? A. That is the why, sir.

Q. Do you now state, Mr. Kelly, in view of the situation as you then understood it, that you took the quickest method and the best means of ascertaining with dispatch the facts about that bill? A. Not the quickest method or the best way. The best way in my judgment for me—to

satisfy my mind—there were a great many things going on. I was waiting. Your investigation was going on, and there were two or three branches of the government working here, and I wanted to see what the result of these things was going to be.

Q. When your daughter gave you the slip of paper, and you compared it with the list in the "Bulletin," and found that the numbers corresponded, did that satisfy your mind that the bill was the same bill? A. My daughter did not give me the same paper.

Q. When you saw the sheet of paper which you have stated she wrote and laid upon your desk, and made that comparison, did that satisfy you that the bill was the same as the one mentioned in the list mentioned in the "Bulletin"? A. No, sir; I was not satisfied.

Q. And yet, in view of that fact— A. (Interrupting.) I was not satisfied as far as my positive knowledge was concerned—I was not, and I wanted to be in a position that when I was going to talk I would know positively what was there.

Q. You say you wanted to know positively what was there? A. Yes, sir.

Q. And did you not take the opportunity of verifying positively that knowledge by reaching out your hand and taking out the bill and looking at it? A. If I had any use for the bill possibly I would, but I had no use for it, and I just locked it up, and thought I would wait and see.

Q. Is it not a fact that you refused to gain this positive knowledge about this case connected with the number of these bills because you did not want to be called as a witness to testify? A. No, sir; I did not. I was not believing everything I read in the "Bulletin"; I did not know whether that was true or not, and it did not impress me that I had to investigate it.

Q. What did you do with your bill when you left the desk at that time? A. It was laying on the paper like that. I took that and put it in the paper and locked it up in my bureau; I have got the key in my pocket, and it has been there ever since.

Q. Do you mean to tell this committee, Mr. Kelly, that you had no conversation with your daughter on that day concerning the number of this bill, or anything about it? A. No, sir; I do not.

Q. Do you mean to tell this committee under oath to-day— A. (Interrupting.) I do not think I saw my daughter that day afterwards.

Q. You did not? A. No, sir.

Q. Did you not state that you had a conversation with your daughter after you had sent this bill upstairs to her? A. No, sir; I did not—not in conversation with her at all—no conversation.

Q. Did you see her? A. No, sir; I don't think I saw her that day. I came away that afternoon. I had business to do in San Francisco, and was pretty busy all day.

Q. Where is the desk? A. In my library.

Q. Downstairs or upstairs? A. That is on the middle floor. I have a very large house—twenty-one rooms in it.

Q. When you went into the library that day did you go direct to your dining-room? A. No; I went upstairs to my library. There is nobody lives on that floor but myself. My daughter was upstairs above. That was on the third floor up above.

Q. Your library, I suppose, you did not keep locked? A. My library?

Q. Yes. A. I keep my bookcases locked.

Q. The room in which your desk was or is? A. My library is adjoining the bedroom.

Q. Is your library ordinarily locked? A. The bookcases are always locked.

Q. The room is always open? A. The entrance to the library is always open.

Q. Do you keep your desk locked up? A. No, sir.

Q. What is it, flat top? A. Flat top, and sometimes I lock some of the drawers.

Q. How did you come to ascertain that your daughter had given you the number of a bill in response to your message? A. What?

Q. How did you come to ascertain, and when did you ascertain, that your daughter had given you the number of a bill in response to your message? A. I told the man to tell her to write down the number of the bill and place it on my desk.

Q. I did not ask you what you told George, but I asked you when you first ascertained and how you came to ascertain your daughter had written the number of a bill? A. When I went upstairs the sheet of paper was lying along side of this, and the envelope was along-side of it.

Q. The "Bulletin" and the slip of paper were lying there? A. The slip of paper was there and the envelope was there; in what position it was I do not exactly remember.

Q. But you had no conversation whatever with your daughter concerning this note? A. No, sir; I did not.

Q. Did you talk with your daughter at all during your stay at the house? A. I did, when I first went into the house. The girls were busy doing their work upstairs.

Q. Where was your daughter when you opened your mail? A. Two of them were in the kitchen.

Q. I refer to your daughter Alice? A. She was getting my breakfast or dinner—getting me something to eat.

Q. Just before you began to eat, you opened your mail? A. While I was sitting at the table I opened my mail.

Q. Who served your luncheon? A. The girls put my luncheon on the table, and I sat there eating. It was laying on the table.

Q. Did you look at your mail before you dined that day or after? A. I looked at it before I started in to eat.

Q. Opened it all before you started to eat? A. Yes, sir.

Q. How did your daughter come to be upstairs, Mr. Kelly, before you had begun to eat, she having prepared your meal and alone to serve it? A. After putting my meal on the table she had her work to do and went upstairs. I says, "Girls, do not neglect things for me; I can eat and get out of here very quick."

Q. You now testify that the fifty-dollar bill which you have shown to this committee is the same bill which you found in the envelope when you opened it? A. As far as I can swear to, it is the same bill. I have not seen any other bill—

Q. You opened the envelope and sent it to your daughter? A. No, sir; I did not, sir. What do you mean—from Sacramento?

Q. In your house, in your residence; is not that correct? Is there anything wrong with that question? A. I opened the envelope.

Q. And sent it to your daughter? A. Yes, sir.

Q. How long after that was it when you found it on your desk? A. Fifteen or twenty minutes.

Q. You locked it in your desk? A. I took it in my bedroom and locked it in my chiffonier.

Q. Did not look at it? A. No, sir; put it with other valuable papers.

Q. How long did it remain in your chiffonier? A. Until yesterday morning.

Q. You suspected that the bill in that envelope was one of those marked bills mentioned in the "Bulletin"? A. I cannot say that I had any great suspicion about that.

Q. Didn't you slightly suspect it? A. I can say I made a careful study of my actions and connections.

Q. I will put it lightly; you had a doubt whether you did or not? A. I do not know what you can call it. I had a kind of shrewd business way of acquiring what was doing.

Q. With that idea in your mind, whatever it was, you made no search whatever in that envelope to find out what the number of the bill was? A. I did not have implicit confidence in what was in the "Bulletin," and I have not implicit confidence in what is in any paper.

THE CHAIRMAN: Q. Did you have implicit confidence in what was in the envelope? A. I cannot say that I did.

MR. SIMPSON: Q. When did you first see Mr. McNab after the 30th of January? A. The first time?

Q. Yes, sir. A. To talk to him?

Q. Yes, sir. A. Last Saturday. I talked to him the week before through the phone.

Q. Do you mean long-distance, or in the city? A. In the city.

Q. What conversation did you have with him then? A. I asked him if he did not think it was time to pay me something on that printing bill.

Q. Did you have any conversation about any bills or about this bribery scandal? A. No, sir; I did not.

Q. When did you personally talk with him? A. Last Saturday.

Q. Where? A. In his office.

Q. In San Francisco? A. Yes, sir.

Q. Did you not tell him on that occasion, in substance, as follows: that you had met Senator French on the evening of the reading of the Corbin affidavit, after the "Bulletin" appeared in Sacramento? A. Yes, sir; I told him that.

Q. Did you not tell him that you had met Senator French on that occasion down the street from the Golden Eagle Hotel? A. No, sir; I told him I met him in front of the Capital Hotel.

Q. Did you tell Mr. McNab on that occasion that Senator French appeared to be very much excited when you met him? A. I did not.

Q. Did you tell Mr. McNab on that occasion, when Senator French saw you, he rushed over to where you were?— A. I did not. He did not, either.

Q. Did you tell him (Mr. McNab) on that occasion, that French handed you a package? A. I did not.

Q. Did you tell Mr. McNab on that occasion in his office in San Francisco that French told you to get that package out of town quick? A. I did not, and Mr. McNab lies if he says so.

Q. Did you not tell Mr. McNab on that occasion that Senator French said to you, "They are liable to search me; I don't want them to find that?" A. Never said such a word as that in his life—"I do not want

them to find that," or, "They are liable to search me." He did not say that.

Q. Senator French did tell you, as a matter of fact, in that conversation that they were liable to be searched, did he not? A. No; he said he heard that there was a warrant out for them, and that the object was to search them.

Q. He mentioned, then, during the conversation, as a matter of fact, the subject of search? A. Did not express any fear to me that he was afraid of being searched.

Q. During that conversation he used the word "search" in connection with the pursuit of this money? A. The rumor that he heard.

MR. SIMPSON: Please repeat the question, Mr. Reporter.

THE WITNESS: I did not ask him what he heard. He told me he heard it.

(Question read.)

Q. You answer that question, yes or no; it is a fair question. A. What is that?

MR. SIMPSON: Repeat the question.

(Question read again.)

A. The word "searched"—he did not use that word.

Q. The word "search" was not used? A. You said "searched."

Q. Search? A. Are to search them—that is the word. I thought you said s-e-a-r-c-h-e-d; I thought that is what you said; I thought you said "searched."

Q. Mr. French did use the word "search"? A. In general conversation, yes.

Q. In what way; state his words. A. His words were that he heard that McNab had been to the District Attorney to try and get a warrant for them, and that the object was to search them. That is the words.

Q. Did you not tell Mr. McNab in the conversation which you have been referring to, which occurred in his office in San Francisco, that you opened the package which Mr. French gave you, and found a fifty-dollar bill in it? A. That is an absolute lie, if anybody says so. I never said it to any living soul—never used such an expression.

Q. The bill that was given to you by Senator French, as you have already testified to, was not in an envelope when he gave it to you? A. It was as you saw it here.

Q. Not in an envelope? A. No, sir.

Q. Just the bill? A. Yes, sir.

Q. Did you not tell Mr. McNab in the conversation which you had with him in his office that you examined the bill which Senator French gave you, and compared it with the list published in the "Bulletin"? A. That is an absolute lie. I told him I did not examine it.

Q. You did tell him that you did not examine it? A. Yes, sir. Yesterday morning was the first time—

Q. How did you come to have this conversation with Mr. McNab? A. Well, I have already explained that.

Q. You went to Mr. McNab of your own volition to relate to him certain facts which you knew in connection with this investigation? A. No, sir.

Q. As a matter of privilege, did you not? A. No, sir; I did not go for that purpose.

Q. How did you come to consult Mr. McNab as an attorney on a question of privilege if you did not volunteer any information you gave him? A. Mr. McNab and I have been talking pretty confidential for the last two or three years on legal matters and other things.

Q. You brought up the subject? A. No; it came up in a general way first, and then after those men were indicted, then the matter struck me.

Q. Why did you say to Mr. McNab, then, if you were talking in a general way, that what you came to him on was a question of privilege? A. Then I said to him—I said to Mr. McNab, “Those men are indicted and they are charged with a crime. Now,” I said, “certainly I had a little—as the thing went along I had a little suspicion that the bill may have been one of those bills.” I had that suspicion.

Q. You were absolutely free of any connection with this case? A. When a crime was committed, I went to find out and consult him as an attorney. If in the event that I should find out that this bill was one of those bills, then I saw that it would be my duty to turn that in as evidence, and not to conceal it or withhold it. That is what made me—

Q. (Interrupting.) Yet, when you were talking to Mr. McNab on a question of privilege which you suggested, you did not know at that time that the bill was the same bill as is listed, of your own knowledge?

A. No, sir; I did not know.

Q. Why did you mention the matter of privilege to Mr. McNab; did you feel that you would be involved some way criminally in this matter? A. Because if it turned out what the “Bulletin” and everybody reported was marked bills out—if it turned out to be one of those marked bills, I wanted to be careful in my conduct; careful in what I was doing, and that I would not be responsible for helping or aiding in any manner this bribery or the prosecution of these men. They were charged with a crime and indicted.

Q. And you wanted to do your part as a citizen to bring them to justice if they were guilty? A. Yes, sir; if it turned out that that was one of the bills in there.

Q. How is it, with that public spirit in your heart and mind—why didn’t you go the first opportunity you had and verify the number on that bill? A. I did not want to do that until I found out exactly my position. If it was there I was going to do it.

Q. Was your hesitation and delay about that because you did not want to take any part in bringing anybody who was guilty to justice?

A. I had no hesitation until last Saturday. Last Saturday was the first time I talked to Mr. McNab on the proposition, and that is why I talked to him as an attorney, and went through the question of personal privilege, until I was sure that was one of the bills used in that bribery or not.

Q. You have related all you told Mr. McNab under this question of privilege, have you not? A. No—yes; I guess I have. I told you what happened.

Q. If you went to him on a question of privilege, you understand that you meant that your communication with him was not to be given out, didn’t you, when you spoke of privilege? A. It was a question of confidence until such time—

Q. (Interrupting.) You did not expect what you told him to be given out, having mentioned privilege to him? A. I meant to wait until such time—

Q. (Interrupting.) You were willing to have it out? A. Until he and I could act together if there was anything of that kind.

Q. That being a question of privilege, why have you come here to-day and freely and voluntarily stated to this committee everything you told Mr. McNab? A. What is that?

Q. Having suggested to Mr. McNab that what you were going to talk to him about was a matter of privilege between attorney and client, why do you come here to-day and tell everything that occurred between you and Mr. McNab? A. Because Mr. Belshaw told me yesterday that Mr. McNab was not my attorney, and that he and Mr. McNab would tell this committee that I said that Mr. French gave me that note, and told me to get it out of Sacramento as quick as I could. Will you let me finish why I said this? You asked me why; I want to explain why. Mr. McNab, when I went to him yesterday and he thought I had talked to a third person—when I talked to him yesterday to talk to me as an attorney when I had this evidence and he did not know that I had seen that bill that morning, he said, "I will talk to you in confidence," and commenced to smile; and I says, "All right; confidence goes, Mr. McNab," and I talked to him on this proposition—showed him this bill as I saw it the first time that morning. That is the reason why I talked with Mr. Belshaw and thought—

Q. (Interrupting.) I do not want to know about the thoughts. Did you not, in the conversation you had with Mr. McNab in his office, tell him that the bill which was handed to you by Senator French, and mailed by you to yourself in San Francisco, was the first bill on the "Bulletin's" list—a bill of the Bank of Santa Barbara? A. I never told him it was. I told him that I took a note of a party that I thought looked at it, and my impression was that it was that bill, but I says, "I am not positive about that."

Q. What did your daughter write on that slip of paper? A. Just about the figures that is on that "Bulletin"—right on there, and I copied them off in my book.

Q. Just put on your glasses and read to me what your daughter wrote on the slip of paper. Take your notebook. You copied it in your notebook. Take your notebook, and turn to the place where you transcribed the writing your daughter made. A. "B383 479 2104 P, National Bank of Santa Barbara;" but it don't say California here. I did not put that down.

Q. What was written by your daughter on the slip of paper? A. It must have been just as I copied it—must have been.

Q. Have you any independent recollection about it? A. I put it down just as I saw it on the paper.

MR. DIGGS: Q. You had asked your daughter to get the number of this bill? A. No; she did not know there was a bill in there.

MR. SIMPSON: Q. What did you tell your son-in-law George as near as you remember? A. I says, "Take that upstairs, and ask Alice to give me the number of that bill, and tell her to look over this," and I just put that mark around there.

Q. What was your idea in having her to look at the list in the "Bulletin"? A. I expected she would take the bill out of the envelope and look at it, but I discovered she did not.

Q. What did you want her to do with the "Bulletin"? A. To see if that bill compared with the number in the "Bulletin."

THE CHAIRMAN: Q. You did not tell her to make any comparison?
A. I did not; no, sir.

Q. You did not, through your messenger? A. No, sir; I told her to compare that bill, and see——

MR. SIMPSON (interrupting): Q. See if it was any of those bills mentioned there? A. I did not say there was any bill in this, but I supposed she would naturally know. She told me when she saw the word "private" she did not open it, but she copied from that paper.

Q. She told you afterwards? A. She told me yesterday morning. That is how I came to find out. After I discovered yesterday morning that this note was not the same as on the head of that, I asked her—said, "Did you open this envelope and take a bill out," and she said, "No; I did not." I says, "What did you write that bill that I asked you to write down—where did you write it from?" and she says, "I wrote it off of the newspaper."

Q. Mr. Kelly, I am going to ask you to state again as nearly as you can what you told your son-in-law to do with that bill and paper when you sent them up to your daughter. A. I told him to take that upstairs, and ask Alice to give me the number of that bill, and that is all the words I said.

Q. And in response to that message you now learn that your daughter took the paper; did not open the envelope and look into it, but simply took a piece of paper and wrote down the number of the first bill on the "Bulletin" list? A. Generally——

Q. One moment. I am going to insist on your answering the question, and you can answer it "yes" or "no" and explain it. Read the question. A. (After question read.) I discovered that yesterday morning.

Q. That is a fact, is it? A. As far as I know, yes.

Q. Have you any reason to give or any solution to furnish or advance to this committee why your daughter took a slip of paper and wrote down the number of one bill on that "Bulletin" list, or what her object was in doing it? A. She thought my pencil mark indicated the number of that bill because I did not show the bill.

Q. You had the paper open before you. What reason would there be for a man to send a bill number up to his daughter to put down the number when he had it before him? A. I put the pencil.

Q. You took the paper and marked one of the bills and sent it to her; she, in response, wrote that down on a slip of paper? A. I thought that would be sufficient.

Q. And your daughter, all the time you were in that house, never came to you, and asked you an explanation about it or what you wanted about it? A. I have only been in the house once since.

MR. SIMPSON: Will you repeat the question; it is a fair question? A. You say all the time I have been in the house. I have only been in the house a very short time.

Q. I will ask you the question again. In view of what you have just testified to, you now say that your daughter did not have any conversation with you while you were in your house this day with reference to this message you sent to her or in reference to the writing on the slip of paper she made? A. During which day?

Q. The day that you sent this paper up to her by your son-in-law? A. When I saw the number on the paper she left on the paper I asked her

no questions. She was not on the floor. She was upstairs attending to business, and I just took a note of it in my book, and took the sheet of paper and threw it in the waste basket.

Q. You found the paper on your desk? A. Yes, sir.

Q. You had no conversation, you have testified, with your daughter on that occasion? A. No, sir.

Q. During your visit at your residence on that occasion? A. No, sir.

Q. On this matter? A. No, sir; not at the time when I took the note.

Q. Did you at any time prior to your leaving the house on that day? A. I do not remember.

Q. Your daughter did not come and ask you what you wanted by that message? A. No, sir; she did not.

Q. She did not say she had written the number of this bill on a piece of paper at your request, to you? A. No. She had left it there, and I suppose——

Q. (Interrupting.) She did not say she had left it on your desk for you—did not say that? A. She may have said that upstairs—said the paper was on the desk.

Q. You are not very certain? A. I do not remember.

Q. You are not very certain whether you had any conversation with your daughter on that occasion or not about this matter? A. I do not remember that I did, but I may have. I cannot remember every detail.

Q. What she did in response to this message you sent upstairs to her was not what you wanted her to do, was it? A. Well, I thought it was.

Q. Well, what she did, as you have since learned, was not what you wanted? A. No, sir; it was a mistake.

Q. Did you not tell Mr. McNab during your conversation with him in San Francisco that you had taken the bill which Senator French had given to you, had addressed it to San Francisco to yourself, and had placed a special-delivery stamp on the envelope? A. No, sir; I never used the word special delivery, because I could not.

Q. Did you not tell him during that conversation, "That bill is where I can get it?" A. No, sir; he asked me the question.

Q. (Interrupting.) Did you not tell him it was where you could get it? A. (Continuing.) ——if I had control of it, and I said, "I don't know; I have not seen the bill since the first day it was locked up."

Q. As a matter of fact it was locked up in your chiffonier? A. I told him I did not know, because I had not seen it, because I wanted to be sure and open my chiffonier and see it was there. That was last Saturday.

Q. At the time you had that conversation with Mr. McNab, did you not know that it was locked up in the chiffonier? A. It was when I left home.

Q. Can't you say positively? A. I cannot say.

Q. Are people in the habit of abstracting things from your chiffonier? A. No; I cannot say. My house was a large house, and I wanted to be sure it was there.

Q. So you were not sure enough to tell Mr. McNab that you knew where the bill was when you had that conversation? A. I wanted to be positive when I was talking with him.

Q. You were very guarded in your talk with him? A. Sometimes be away from home, and you are asked a question——

Q. (Interrupting.) I will ask you this question, and I hope you will

answer it directly: Did you not tell Mr. McNab during that conversation that the bill was where you could get it? A. He asked me if it was under my control, and I said, "I believe it is where I left it."

MR. SIMPSON: I will ask the reporter to repeat the question, and ask you to answer it by yes or no, and explain your answer. A. (After question read.) Which bill have you got that to? What do you mean—this bill I am talking about?

Q. Is there any more than one bill in this? A. You mean the fifty-dollar bill, don't you?

Q. Is there any other bill we have been considering here? A. May be you are talking about Assembly Bill, or something of that kind.

Q. Is that so? A. I was talking about a good many things with Mr. McNab.

Q. In your conversation with Mr. McNab in his office, did you have any conversation with him about any bill you had—about a fifty-dollar currency bill? A. Yes, sir.

Q. Did you not tell him in that conversation that that bill, the fifty-dollar bill, referring to that bill, was where you could get it? A. The bill that Mr. French gave me was where I could get it.

Q. You told him that? A. Yes, sir.

Q. Did you not tell Mr. McNab on that occasion that you thought it was a good thing to hold on to a bill of that kind when dealing with a man like French? A. No; I never said anything of that kind; no, sir.

Q. Did you ever say that to Mr. McNab? A. I never did; no, sir.

Q. Did you ever make any of these statements to Mr. McNab which you have denied making here this afternoon? A. I did not.

Q. Any statements you made to Mr. McNab, and all the statements which you made to Mr. McNab, during the conversation which you had with him in his office were truthful, were they not? A. As far as he may have asked the questions, and my answers were truthful.

Q. Did you say anything to him or convey any information to him at that time which was not truthful? A. How do you mean?

MR. SIMPSON: Read the question again. A. (After question read.) Any direct question that he asked me I told him the truth. If he asked me some enigma that was a puzzle I told him I did not know. Mr. McNab has a funny way of asking questions.

Q. Can you say whether or not any statements you made to Mr. McNab during that conversation were untrue? A. I may have been guarded in my answers to his questions. Anything I said to Mr. McNab in answer to his questions was absolutely true.

Q. Was anything said to him voluntarily, without replying to a question, untrue? A. With the exception of anything that Mr. McNab says, I said—

Q. (Interrupting.) I have not said that Mr. McNab is going to say anything about your statement. A. You ask me if I said those things to Mr. McNab, and Mr. McNab said those things to me. Anything that I said "yes" is the truth, and anything I said "no" is the truth.

Q. I am now asking you, Mr. Kelly, whether every statement you made to Mr. McNab during your conversation with him that day relating to this bill which Mr. French gave you and relating to this investigation was true? A. Everything that I said to Mr. McNab, that I say I said to Mr. McNab, is true, but not what Mr. McNab says.

Q. I have not said a word about what Mr. McNab says.

THE CHAIRMAN: Q. You can answer that question yes or no. There is no use debating that. A. You ask me a direct question.

THE CHAIRMAN: Senator Simpson, you ask the question again, and we will have a direct answer, yes or no.

MR. SIMPSON: Q. You had a conversation with Mr. McNab in his office in San Francisco? A. As an attorney; yes, sir.

Q. You talked with him about this investigation, did you not? A. He talked with me about it.

Q. Didn't you talk with him about it? A. Talked about the indictments.

Q. Did you make any statement of facts to him in that conversation? A. No; I asked him for advice in the event of——

Q. Did every statement which you made to Mr. McNab on that occasion—or was every such statement the whole truth? A. Every statement I made to Mr. McNab was the truth as I acquired it up to the time that I was talking to him.

Q. Have you learned since, Mr. Kelly, that any statement you made to Mr. McNab then was not true—— A. (Interrupting.) No, sir.

Q. (Continuing.) ——at the time you made it? A. I have not. I have had no conversation with Mr. McNab since.

Q. Can you not say now that every statement you made to Mr. McNab during that conversation was the truth? A. Anything that I said to Mr. McNab was true—that is my knowledge, that I knew of my own personal knowledge.

Q. And from what you know to the present time? A. And up to the present time, yes—up to right now; yes, sir.

Q. And nothing you said to Mr. McNab by way of statement was untrue that you found up to the present time? A. I have no recollection of anything untruthful that I told him. I am not in the habit of telling untruth.

Q. Are you willing to say that there may have been something which was untrue at that time? A. No, sir; I am not.

Q. You are not willing to say? A. No, sir; I am not.

Q. Are you willing to say that with your present knowledge —— A. (Interrupting.) That it was the truth.

Q. (Continuing.) ——everything you told him was true, and you told nothing untrue? A. Nothing untrue.

Q. Answer that question yes or no. A. Which question?

MR. SIMPSON: Repeat the question, Mr. Reporter.

A. (After question read.) Nothing untrue to my best knowledge.

Q. Why do you qualify to the best of your knowledge. Are you in the habit of going to your attorney and talking confidentially and misrepresenting things? A. I would like to know what Mr. McNab says.

Q. You are telling the whole truth? A. As far as I am concerned.

Q. You told him the whole truth, and nothing but the truth, on that day? A. Yes, sir.

Q. You said in your answers to Senator Belshaw—you said you did not want to tell him everything until you knew what you were talking about? A. I will tell you what I meant: what questions he was asking me I could not answer until I knew what he was talking about.

Q. You could not answer what? A. He was asking me lots of questions that I did not know positively; he told me that he knew everything that I did not know.

Q. Now, Mr. Kelly, supposing that Senator Belshaw gets on the stand here and says he had a conversation with you in room 62 of the Capital Hotel on the 11th of February—

THE CHAIRMAN (interrupting): 13th of February.

MR. SIMPSON: Q. —and that you during that conversation said in substance that Senator French had given you a bill, and that you had looked at it, and that it was one of the marked bills, one of the bills in that "Bulletin" list, and that you mailed it to yourself in San Francisco—testifies to that statement under oath, what have you to say to that statement? A. I would say that Mr. Belshaw is telling an untruth.

Q. Suppose he makes that statement willfully and after due deliberation? A. He is telling what is untrue.

Q. Is that the strongest language you want to apply to it? A. That is about as fair as a man wants to talk, is it not?

Q. I should say it hardly meets the situation according to your point of view. I think that is all.

THE CHAIRMAN: Anybody else want to ask any question?

MR. ROWELL: I want to ask one question.

MR. ROWELL: Q. Did you knowingly make any statement to Mr. McNab that you knew was not true? A. No, sir; I did not.

THE CHAIRMAN: That is all, Mr. Kelly.

(Here Mr. Kelly left the room.)

TESTIMONY OF GAVIN McNAB.

Recalled.

THE CHAIRMAN: Q. Now, Mr. McNab, will you, as concisely as possible, state to this committee your entire conversation with Mr. Kelly—Mr. Martin Kelly of San Francisco—concerning Senator French, and one of the marked bills, or supposed connection between Senator French and one of the marked bills? A. Do you want the conversation confined to that?

Q. Yes, sir; at present. A. Well, on Saturday evening last, Mr. Kelly came to my office and talked over a little matter with me—

Q. What Saturday was that? A. Last Saturday evening. I do not remember the date.

Q. That was the 11th? A. Yes, sir. Previous to that I will say that during one of the hearings here, as I was going out of the building, Mr. Kelly was coming down the stairs in the crowd, and he leaned over to me and touched me on the shoulder, and he says, "If you get in a hole in this matter and don't make good, I can help you." I did not have any further conversation with him until last Saturday evening when he came to the office, and before he was going he says, "Will you folks make good on that thing up in Sacramento all right? Now, I will tell you something; it won't do any harm to tell you now. You know this fellow, French; I have known him for years; he is very tricky." He says, "I know him way back in Bill Higgins' time." He says, "He was elected to the Legislature by Bill Higgins. Then he went and threw Higgins down and went to Buckley, and Higgins says to me, 'He is a bad one.'" He says, "Do you know I spent a good many thousand dollars two years ago when I was working the Sen-

atorial fight for somebody on that very French and two Assemblymen in his district?" He says, "This year when I went up to Sacramento—hold on, there is another thing," he says. He said, "Two years ago when I was up there in Sacramento, French said to me, 'They gave me \$7,000 to beat this pilot bill up here, and I have that money,' and I said to him, 'Well, French, if there is any of that left, when the Legislature adjourns you ought to remember me.' 'Well,' he says, 'that will be all right, Kelly,' but he never gave me a cent. So, this time when I came up to Sacramento, and the Senatorial fight was on I took him one day into the billiard room of the Golden Eagle Hotel. I says, 'French, are you tied up on this Senatorship? I do not want you to be tied up; there is something coming to me in this. Nobody has asked me to do anything in this Senatorial fight, but if they do I want to be able to call on you.' He said, 'I am going to programme with the man that has given me my job on the water front, William F. Herrin.' 'Well,' I says, 'that is all right about your programming, but don't you think you owe something to me?' 'Yes, I think there is something coming to you for what you did for me,' he said. That was all the conversation I had with him then. Then I wanted him to get some places—a place for somebody, he gave me the name, but I have forgotten—some patronage, a Senate committee—and he was making a great howl about it. I did not like being treated that way, and so I went to Lieutenant Governor Anderson, and he asked some of the Senators, and obtained a place for the man I wanted. Then, French came to me and says, 'I have \$2 of patronage left, and I will give it to your man; I was going to give it to O. Rodgers.' I said, 'Don't you throw down O. Rodgers; I fixed the man in a place. Rodgers was in the convention that voted for you; he was a delegate; you give him \$2.'" So that was all the conversation we had about that—about these matters. Then he said: "On the day that the Corbin affidavit was read in the Senate, and after the 'Bulletin' arrived in Sacramento, I met French coming down the street below the Golden Eagle Hotel very much excited. When he saw me he rushed up and pushed out a package to me. He said, 'Take that and get it out of town—get it out of town at once; I will be searched, and don't want that found; now, get it away.' I took it from him, and remembering the tricky ways that French had with me, and what I considered his ingratitude, I concluded I would examine that package very carefully before I mailed it." He said, "I guessed pretty well what it was; so I opened it, and it was the fifty-dollar bill at the head of the 'Bulletin's' list—a bill from a bank in Santa Barbara. I then put it in an envelope, addressed it to a person in San Francisco, put a special-delivery stamp on it, and sent it through the mail." I then said, "Mr. Kelly, where is that?" "Oh," he said, "it is all right." "Do you control that?" "I think I do." "Can you make sure that you do control it?" "Yes, I can make sure." "But," he said, "I charge you not to say anything about this." He said, "I will charge you as an attorney not to say anything about this," and went away.

MR. SIMPSON: Q. Where was this conversation? A. In my office. The next evening I telephoned Kelly. I had some difficulty in reaching him, but I finally reached him out on Waller—his family gave me the number, and I telephoned out there, and I said "Kelly, have you ascertained absolutely that you have that bill, and that that bill

is all right?" He said "Yes, that bill is all right, and those people will never get it away from me." I said, "When are you going to Sacramento?" He says, "I am going some time to-morrow." I said, "I am going on the 9 o'clock." He says, "I will go on that 9 o'clock train." When the train was about Tracy, I think, I went through, into one of the divisions of one of the Pullmans—the porter division, where the lavatory is—and Kelly was there, and I sat down with him, and I talked about this bill. One thing he said before leaving my office—just before leaving—he says, "After the way French treated me I feel good to have that bill." He says, "It is a fine thing to have that bill to hold over him." So I took up the conversation in the lavatory, and he talked quite freely about it; we discussed the bill. I says, "Mr. Kelly, suppose the Senate committee should authorize one of its members to ascertain as a matter of fact whether the bill existed, would you be willing to meet that member so delegated and tell him what you have told me?" He said, "Well, I will tell you, to show him the bill—I do not want that bill where Seymour can get a search warrant and get it." "Well," I says "suppose that member should see it even in San Francisco?" "Well, he could get a search warrant there; if I show that bill it will be because I am sure that Seymour is not going to get his hands on it." I says, "You surely know if a member of this committee was talking with you, it would be a matter within the committee's knowledge, and not Seymour, and you would have possession of the bill; so you could intrust the bill to somebody unknown to Seymour, and they could show it to the committee, and then your statement could be taken afterwards and connected with the matter." I proceeded some time in the matter, and finally he said to me, "I don't know but what I would be willing to meet Mr. Chairman Belshaw of that committee, and tell him all that I have told you." So when I came—I asked him where he would be during the evening. He said in a cigar store near the Golden Eagle; that I could find him there. I said, "Well, you remain up until late, because there may be something doing, and I may have an opportunity to arrange so that you can keep your contract with the Chairman," and I met Belshaw in the Senate chamber just before the hearing and asked him if he could consult with the members of the committee and be authorized, and Mr. Chairman Belshaw told me afterwards that he had spoken with the members of the committee and they had agreed that all the information obtainable should be obtained, and that if he could come in contact with this person and obtain this information he would do so. I asked him where he would be at a late hour, and he said at the Golden Eagle Hotel. I found Martin Kelly. He was with Senator Welch, in some room of the Capital saloon. I sent a bell boy in from the Capital office and found him finally, and he came in there, and I told him that Mr. Belshaw would come and go up to the room that I was occupying in the hotel—room 62—and I said to him, "Go up," and I said to him, "Mr. Belshaw will come up here, and I hope, Mr. Kelly, you will make your statement to him as you have to me, and you can surround it with all the precautions you can. It is a duty that that information should be given. What is the use of sheltering crooks?" He nodded assent, without saying specifically what he would do. He gave me to understand that he would give Senator Belshaw the information. He did not

say how much information. He said he would see him, and talk it over with him. I found Senator Belshaw at the Golden Eagle, and asked him to go up there. That was the last I heard of it, or knew anything about it, until the day before yesterday afternoon, there was a telephone message at my office where Mr. Kelly had tried to call me up from Sacramento, and not being in he left word with my stenographer to get word to the gentleman he met in Sacramento not to return to Sacramento until he saw him. The next day—that was yesterday—I received a telephone message from Martin Kelly about noon, and he wanted to know if he could not see me. In the meantime I had seen a friend of Senator Belshaw, and gave him that message to transmit to Senator Belshaw. I told Martin Kelly over the phone that I would see him at a quarter past 1. He did not get to my office until about twenty minutes to 2. Then he told a very different story. It is a very long story.

MR. RALSTON: Q. In substance what? A. That he had come to the city to get the bill; that he went to his house, and he said, "Now, let me tell you how that bill arrived." He says, "You know after I had that bill in Sacramento, I took it between my fingers this way—just this way; I went into the French restaurant and ordered a bottle of Budweiser beer, and had the "Bulletin" in front of me, looking at the numbers this way and I held the bill between my finger and thumb—the fifty-dollar bill—I won't open it, I won't look at it—no, no; I would not look at it, but I thought to myself this is one of those bills. There is the 'Bulletin' spread out, and this is one of the bills, and I took up a piece of paper like this—you see, up in Sacramento I am interested in the Masonic Cemetery bill; these are code citations bearing on it on this yellow paper. I folded the bill in this and put it in an envelope and addressed it to Martin Kelly, to my address on Fremont street, and marked it 'private.' You know a few days afterwards in San Francisco—I was in San Francisco, and I was thinking about that, and I opened my mail and I just tore open the end of this envelope, without looking at what was in it, and I said to a friend of mine who was there—my daughter was upstairs—I said to him, 'Take this "Bulletin"—here is the "Bulletin," and there is a fifty-dollar bill in there; let her mark off of the "Bulletin" which bill this is.' She came down in a little while, and she had marked the first bill—Santa Barbara bill. I said, 'All right.' So I never looked at it—never looked at it—but just took that and wrapped it up in the 'Bulletin,' and put it in the chiffonier drawer and kept the keys. Now, after I spoke with you about it, I went and unlocked the chiffonier drawer, and the 'Bulletin' and bill were there, and I thought it was all right. After you telephoned, before I went to Sacramento, it was all right; the envelope and the bill were there, and you know I came down this morning to get that bill to take it up before the Senate committee, promised to go up before the Senate committee, and do you know, I opened that bill, and it was a gold note; it was not a bill on Santa Barbara at all." He says, "You see when I sent that paper up there, my little daughter thought to mark off one of these bills on the 'Bulletin,' and so she just marked off the first one." That was all. I made no comment on that conversation at all. So he went away. Incidentally with this, he told me about his conversing with Senator Belshaw.

MR. RALSTON: Q. Won't you repeat to the best of your recollection, Mr. McNab, the conversation that Mr. Kelly told you he had with Senator

Belshaw in room 62. A. He said, "I went in to see Senator Belshaw."

THE CHAIRMAN: Q. Before you proceed with that, I want to ask a question before I forget it: Did he at any time tell you how he got the memorandum of that bill in his notebook? A. Oh, yes; he told me that the first time. That I omitted. He says, "In Sacramento I took my notebook out before I mailed that bill, because I was not going to take any chances, and I wrote this in the book—my notebook."

MR. DIGGS: Q. In Sacramento? A. In Sacramento. "I wrote this in the notebook, before I put that in the envelope—the number of the bill. Let me read it to you. Here it is," and he reads it. He says, "I was not going to take any chances on that—not having the date of that bill," and he read it out to me, and I made a memorandum of it at the time, but I destroyed it afterwards.

MR. SIMPSON: Q. Did you see the memorandum in his book? A. He laid it at an angle, and I could see that it was writing. He says, "I am reading this to you." I could see it was writing, but could not see the words.

Q. Could you tell that it referred to a description of a note? A. No, sir; I could not tell what it was. He was seated as far from me as Senator Belshaw is, and he was at an angle, but to let me see it he turned the paper, and there was one line written there, and he says, "Let me read you this," and he read it.

Q. And what he read was the description—— A. (Interrupting.) Description of the first bill on the "Bulletin" list.

Q. That was during the conversation with him in your office? A. That was last Saturday night in my office?

Q. And at that time he said the bill was in his chiffonier at home? A. No, sir; he did not say that; he never told me where the bill was until yesterday.

MR. RALSTON: I think we ought to get this, Mr. Chairman, because I think it will be necessary to carry the thing along.

Q. Won't you repeat what he told you—what his conversation, as near as you can recollect, was, with Senator Belshaw in his room that night? A. He said, "Senator Belshaw began on me. He says, 'I know what this transaction is.' He told me one thing that I do not remember telling anybody—that when I came down the street, that French came down the street and gave me a bill, and told me to send that away, he would be searched. He says, 'I will be searched; get this away; send this away.'" He says, "I never told anybody that." Then he said, "He went into the thing, and I told him about French giving me a greenback, and that I had had it examined in San Francisco, and it was this First National Bank of Santa Barbara," or something to that effect.

MR. SIMPSON: Q. Did Mr. Kelly, during that conversation—which was held when, by the way? A. This was yesterday.

Q. Did he tell you that he had admitted or told Senator Belshaw that Senator French had given him, Kelly, a bank note, and that he had told Senator Belshaw also that it was one of the marked notes? A. Yes, sir.

Q. Did Kelly tell you that yesterday? A. Yes, sir. He said he was under a misapprehension, based on having depended on his daughter's statement.

Q. His information was faulty in other words? A. Yes, sir; he said

he told Senator Belshaw that, yes. He told me that positively. He never told me about his daughter or anybody else in the first conversation. He told me he examined it before he mailed it.

THE CHAIRMAN: Q. He never mentioned his daughter until yesterday? A. Yesterday was the first time I ever heard of anybody in connection with it other than himself.

MR. SIMPSON: I wish you would commit to writing all you know about this, for your own convenience, and while it is fresh in your mind? A. I do not think my memory is likely to fail me on any of the details, because I am interested.

MR. DIGGS: Q. You understood that he took the number of this bill down the day he got it, and before he went to San Francisco? A. He told me so.

Q. And he also told you it was the first bill published in the "Bulletin"? A. Yes, sir.

Q. The first one on the top of the list? A. Yes, sir; and he discussed it with me as such on the train coming up, when I was trying to persuade him to meet Senator Belshaw.

Q. He said at that time it was the same number as the first bill published in the "Bulletin" list? A. Yes, sir; he said so.

THE CHAIRMAN: Q. Did he say anything about his testimony before the committee yesterday in his conversation with you? A. Yes, sir. He said, "I will go before that committee; I am very sorry that I can not make good on this—very sorry, because I have told all these things, and I was acting in perfect good faith, and I never was so much astonished in my life as when I opened that—I nearly dropped dead," and he says, "I do not like to be in that position, because," he says, "I never was in such a position before in my life. I could not have believed—I am sure of it, and when I took up this bill and found it was a gold note," he says, "I never was so astonished in my life. I am so sorry, because I wanted to do this; I promised to do this, and I wanted to make good."

MR. RALSTON: Q. Did you ask him then how it was he had told you before that he had examined the bill? A. No; I did not say a word to him—not a word; left him entirely alone on the proposition.

THE CHAIRMAN: I think that is all.

(Here Mr. McNab left the room.)

TESTIMONY OF C. M. BELSHAW.

Sworn by Senator Simpson.

THE WITNESS: On Monday, February 13th, I think it was, I received information that some one had possession of one of the marked bills which had been given to him by Senator French. I communicated this information to the committee. Some time in the afternoon or evening—I won't be positive which—of the same day, District Attorney Seymour came to me and talked about some one having some information that he would be willing to give to me, but he did not know who it was, and he said to me that it was merely a hunch that he had. I told him that I thought I had the same hunch. Just before the arguments were made I talked with Mr. McNabb about the information which I had

received regarding this marked bill and Senator French, asking him if the person who had the information would give it to the committee. He said he did not think they would give it to the committee, but he thought the person would give it to somebody selected by the committee, and if the committee would select me, he felt quite sure that the person would give the information to me. I communicated this information to the committee, whereupon the committee unanimously selected me to endeavor to get the information. After the arguments had been concluded and the committee had adjourned I called Mr. McNab to one side, and told him that the committee had delegated me to get the information, if possible, and that if he could communicate with the person and get the interview for me, I would be in the Golden Eagle Hotel somewhere between half-past 11 and 12 o'clock, and if the person would talk with me I would go to him. The committee had an executive session to determine the matter, and that being done by the committee, it adjourned. I went down to the Golden Eagle Hotel; went into the lobby. Mr. McNab was there, and I looked up at the clock, and it was about a quarter to 12—I think it was just a quarter to 12. I walked up to Mr. McNab, and he said to me, "That party is in room 62 of the Capital Hotel, and he will see you; it is Mr. Martin Kelly." I immediately went out of the Golden Eagle Hotel, went upstairs—I had to walk upstairs, because the elevator was out of order—walked upstairs to room 62.

MR. RALSTON: Q. In the Capital Hotel? A. In the Capital Hotel. Knocked at the door, and a voice inside said, "Come in." I opened the door, walked in, and I saw a gentleman inside whom I recognized as Martin Kelly, and he said "Good evening," and I said "Good evening, Mr. Kelly." As I walked from the door to a chair there was nothing said, and it felt like an awkward pause to me; and I said, "Mr. Kelly, I hear that you want to see me relative to the investigation which is now pending before our committee." "Well," he says, "I believe that you are absolutely honest in this investigation." In all this conversation, gentlemen of the committee, I am going to give you the words as near as I remember them. I won't swear that they are absolutely the words, because it is hard for a person to tell you word for word.

MR. RALSTON: Q. Give the best of your recollection. A. I will give you the best of it in substance. He says, "I believe you are honest in this investigation, and that you are trying to get at the truth in this matter"; and he says, "I have something that I think will help you." He says, "I do not want to talk to you as a legislator; you are a Mason, are you not"? I said, "Yes, I am." I said, "Look here, Mr. Kelly; I want to tell you what you want to talk to me about. You want to tell me that on the night of the 30th of January, some time after the 'Bulletin' came to Sacramento, that Senator French met you on the street, that he gave you a fifty-dollar bill, and told you to get it out of Sacramento; that that fifty-dollar bill is the first one on the 'Bulletin' list—a Santa Barbara bill." He kind of straightened up a little bit, and says, "Well, I don't know." And then he started in—I do not know whether the committee desires to hear it or not, but giving me a long history of his political connections with Senator French, with the evident desire and purpose to let me know that he had good reasons for giving Senator French away, and not standing in with him. He said—if the committee desires to hear it, I will give it all.

MR. RALSTON: Yes, that is quite pertinent.

THE WITNESS: He says, "Away back, twenty years ago, Bill Higgins elected French to the Assembly," and he says, "Me and Bill Higgins used to do politics together, and Bill Higgins told me that French was absolutely no good, because when he elected him at that time to the Assembly, Bill Higgins told me that he could not get French to do anything, and that Buckley had absolute control of him." He says, "You know about two years ago I started in to organize San Francisco, and," he says, "I did organize San Francisco. I organized the legislative ticket there, and I worked in with Burns and some of the other fellows on the State ticket; but," he says, "I gave French \$4,000 to make his fight for Senator. When we came up here this time, I says to French, 'If I am going to be interested in this Senator fight I want to count you with me,' and French said to me, 'Well, I am going to stay with the man that gave me my job.' I says to him, 'Job as Senator or job on the water front?' He says, 'I am going to stay with William F. Herrin'—and you know they promised to make him, French, sheriff of San Francisco. I says, 'That is all right; if I need some votes on this Senatorial fight I want to count you with me.' Another thing he said: When I came up here I asked him for a position of page. When I had given him all this money to make his fight with, I thought there was something due me; I didn't ask him for much—just asked him for a page. He monkeyed around, did not do anything, and finally I got the page appointed, and finally he came to me and said, 'I have got \$2 of my patronage left, and I can not give it to you unless I throw down old man Rodgers.'" and Kelly says to me, "You know Rodgers' son was in the convention that nominated French—and I said, 'Oh, well, don't throw him down; I have got the place anyhow,'" and, he says, "I came to the same conclusion that Bill Higgins did, that French was absolutely no good." He says, "On the night that the 'Bulletin' arrived here, I think I was coming over from the Golden Eagle Hotel"—this is as I remember it—"and I met French, and French says, 'Here, I want to see you,' and we walked on down the street, and he said to me, said, 'I hear that Seymour is going to get out some search warrants to search us'; says, 'Here is a fifty-dollar bill; get it out of Sacramento,' and I put it in my pocket," and he says, "I put it in an envelope, and then in another envelope, and addressed it to San Francisco—sent it to a person in San Francisco. "Now," he says, "I did not look at the bill before I put it in the envelope."

MR. DIGGS: Q. Did not look at it? A. No, sir; did not look at it. "But," he said, "I had a friend of mine look at it in San Francisco." Then I put this question to him: "Was it one of the bills mentioned? Did you find out from your friend that it was one of the bills mentioned in the list in the 'Bulletin?'" He said, "Yes." "Well," I says, "now, Mr. Kelly, will you come"—in the first part I want to say—it is pretty hard to remember these things as they occurred—when he first spoke to me when I first went into the room, and he said he did not want to speak to me as a legislator, and so forth, I said to him: "I want you to understand, Mr. Kelly, that there is not anything you are going to tell me here that I won't tell that committee." Put him right on his guard—and then he asked me if I was a Mason. I think that is where that belongs. I said to Mr. Kelly, "Will you come before this committee, and on oath make the same statement you have made to

me and produce that paper?" "Well," he says, "I don't know about that; I don't want to get mixed up in this thing." He says, "I would not like to do that." Then I proceeded to tell him, to lecture on good government and on the duties, as I thought—the duties belonging to a good citizen, especially in a case of this kind, and the next concession I got from him was a question, wherein he said, "Well, will you have the committee meet in executive session?" He says, "You know I do not want to be published in this thing." I says, "Yes; I will have the committee meet in executive session." I says, "You can come there and make your statement on oath, and we will have an executive session." He says, "Now, I want to think this thing over until to-morrow morning; let me sleep on it." I then went after him again, thinking that it might be fatal if he slept on it, and thinking I ought to close the thing up with him right there and then, and I talked with him again about his duty, and I told him he could not afford to uphold the hands of a crook; that as a politician, he knew it was best for him to deal with straight people, because he could not depend on a man who was crooked, and he could depend on a man who was straight, and I gave him the best lecture that I could, and gave it to him very earnestly; and finally he agreed to come before this committee at 1 o'clock, or on Friday some time; I was to let him know what time it would be Friday, in executive session, that he should make the statement to the committee he made to me, and produce the bill. I told him I would not be here until Friday, as I was going to the city on Tuesday night or early Wednesday morning—was going down in the sleeper, and that I would not get back here until Friday morning. That statement you people know, as I made it to you. That is the statement as nearly as I remember.

MR. SIMPSON: Q. You have not met him since, have you? A. Yes, sir; in San Francisco—if you want to hear about that. I was in my office yesterday afternoon, I think about 4 o'clock, and the stenographer came in and said, "Mr. Kelly." Mr. George Dryden was in to see me then, and I said, "Mr. Martin Kelly wants to see me," and George says, "All right; I will go out, and not bother you," and he went out of another door, and did not see Mr. Kelly. Mr. Kelly came in and sat down and shook hands, and he proceeded to deliver the story to me that he delivered this afternoon to this committee, and I immediately proceeded to file objections. I said, "Look here, Mr. Kelly, that is not the statement you made to me," and I told him that he had made the statement to me that French gave him the bill, and told him to get it out of Sacramento. He says, "I never did; I could not have said it; it is not true. How could I have said it?" I says, "You did say it," and I says, "Mr. McNab will testify on the stand that you said that same thing to him." "Mr. McNab is my attorney; I gave him a privileged communication." I says, "I don't know anything about that." In the meanwhile, before Mr. Kelly came to my office, I received a communication from Mr. McNab over the phone that Mr. Kelly would probably be to my office, would come to see me—that he had been to his office, and that he had fallen down. Well, we had a long talk there, and I says to Mr. Kelly, "Will you come up before the committee and make your statement? Mr. McNab will be there and make his statement." "Well," he says, "I am not going to swear to anything that ain't true for anybody." I says, "I do not ask you to do anything of the kind, but you made a certain statement to me which is

not the same statement that you are making to-day, and as a delegate from that committee appointed by them to talk with you, I am going to tell the committee what you said to me," and we had a pretty warm conversation. That is in the main the whole conversation that I have had with Mr. Kelly. I do not think I have left out any important detail at all. I did not give him—he did not give me that statement in room 62 of the Capital Hotel as a Mason; he merely asked me if I was a Mason, and I said "yes," and I was very careful to tell him that every statement he made should be made to the committee by me. And his evident desire was to get back at Senator French; and before he told me about the transaction he took up fifteen or twenty minutes I think—fully fifteen minutes, I think—in telling me his long political history and how he came to the conclusion that Bill Higgins was right and French was no good, and my conversation with him lasted, I should say, fully three quarters of an hour—from three quarters of an hour to an hour—I think about an hour, and before he left I shook hands with him, and congratulated him on coming before the committee, and he again said that he had every confidence in me, and I thanked him, and told him that I regarded the good opinion of the people more than anything else in the world—that I would not swap it for anything else they could give me. I went out of the room, and he says, "I will stay here a while, and give you a chance to get away," and I thought at the time it was his room. I had no idea that it was Gavin McNab's room.

MR. DIGGS: Q. I understand from these remarks that he did not want it to be made public that you were in his room? A. No; he did not want it made public, and I was willing not to have it made public, because he had agreed to come before the committee in executive session, and if he was going to come before the committee I thought it was incumbent on me to keep it in confidence, and you members of the committee will remember I told you this was to be done confidentially on Friday, and not to say anything about it. I did that for the purpose of keeping faith with Mr. Kelly. Is there any question you would like to ask me? I do not know whether I have got in there or not this statement that I said to him: That by coming before the committee and giving this testimony, he would be rendering a great service to the State of California, and that I was very, very glad to know that he would do so. That was just before I left him, you know.

REPORT OF Special Committee of Investigation

CONSISTING OF

Senators Belshaw (Chairman), Simpson, Diggs, Rowell, and Ralston,

APPOINTED JANUARY 30, 1905.

MR. PRESIDENT: Your Special Committee of Investigation appointed January 30, 1905, pursuant to the following resolution:

WHEREAS, There has been this day filed with the Secretary of the Senate in writing certain charges contained in an affidavit which reflect upon the honor and integrity of certain members of the Senate, in that it does charge said certain members with corruption, corrupt conduct, and a willful violation of their obligations as members of this body; and

WHEREAS, It is fit and proper that the charges be fully investigated by a committee to be appointed by the President of this Senate; therefore be it

Resolved, That a special committee of five be appointed by the President of the Senate to investigate all charges and statements contained in said affidavit reflecting upon the honor, integrity and conduct of the certain members of this Senate with relation to the subject-matter contained in said affidavit; and for that purpose, that the said committee be and it is hereby empowered to issue all necessary subpoenas, to have full power to send for persons, books and papers, and to compel the attendance of any and all necessary witnesses within this State, and require the production of any and all necessary papers, books, or documents in order that the powers herein given may be fully carried out; and that it shall report the result of its investigation to this Senate at the earliest possible moment,

begs leave to submit the following report:

Your committee met immediately, and diligently prosecuted an inquiry into the charges made in the affidavit of William Corbin filed in the Senate January 30, 1905, and mentioned in said resolution. Numerous sessions were held and many witnesses were examined, some of whom would not have been material in a court of law, but it was deemed wise by your committee to follow this course for the sake of developing every feature of the subject-matter.

From the evidence before us, after careful deliberation, we respectfully submit the following findings:

First—That the appointment of the Senate Committee on Commissions and Retrenchment, and the placing of Senators Emmons, French, Bunkers and Wright thereon, came about in the due and ordinary course of Senate organization, and without ulterior motive, particularly as to Hon. Alden Anderson, Lieutenant-Governor, who made such appointments in entire good faith, and uninfluenced by any other motive than a most equitable and economic apportionment of committee work, and that the San Francisco "Examiner" had no part in the

creation or institution of said committee or the appointment of said Senators thereon.

Second—That no agreement existed whereby Senator Bunkers was to receive a municipal appointment or other preferment if he would do his utmost against the Continental Building and Loan Association.

Third—That the San Francisco "Examiner," through its representatives, actively assisted said committee in preparing for an investigation of the affairs of the Continental Building and Loan Association by advising with Senator French, a member of said committee, as to the witnesses to be subpoenaed, and furnishing an expert to assist in said investigation.

Fourth—That on the 24th day of January, 1905, in the City of Sacramento, Senator E. J. Emmons, a member of this Senate, did receive and accept from one Joseph S. Jordan the sum of three hundred and fifty dollars in United States currency upon an understanding that the official action of said Emmons, as such Senator, would be influenced thereby in the manner following, viz: that said Emmons, as such Senator, would favor and protect the interests of the Phoenix Savings, Building and Loan Association and The Renters' Building and Loan Association, two corporations whose business methods were then about to be investigated by the Committee on Commissions and Retrenchment.

Fifth—That on the 24th day of January, 1905, in the City of Sacramento, Senator Harry Bunkers, a member of this Senate, did receive and accept from one Joseph S. Jordan the sum of three hundred and fifty dollars in United States currency upon an understanding that the official action of said Bunkers, as such Senator, would be influenced thereby in the manner following, viz: that said Bunkers, as such Senator, would favor and protect the interests of the Phoenix Savings, Building and Loan Association and the Renters' Building and Loan Association, two corporations whose business methods were then about to be investigated by the Committee on Commissions and Retrenchment.

Sixth—That on the 25th day of January, 1905, in the City of Sacramento, Senator Frank French, a member of this Senate, did receive and accept from one Joseph S. Jordan the sum of three hundred and fifty dollars in United States currency upon an understanding that the official action of said French, as such Senator, would be influenced thereby in the manner following, viz: that said French, as such Senator, would favor and protect the interests of the Phoenix Savings, Building and Loan Association and the Renters' Building and Loan Association, two corporations whose business methods were then about to be investigated by the Committee on Commissions and Retrenchment.

Seventh—That on the 25th day of January, 1905, in the City of Sacramento, Senator Eli Wright, a member of this Senate, did receive and accept from one Joseph S. Jordan the sum of three hundred and fifty dollars in United States currency upon an understanding that the official action of said Wright, as such Senator, would be influenced thereby in the manner following, viz: that said Wright, as such Senator, would favor and protect the interests of the Phoenix Savings, Building and Loan Association and the Renters' Building and Loan Association, two corporations whose business methods were then about to be investigated by the Committee on Commissions and Retrenchment.

Eighth—That at the time said moneys were paid to each of the Senators above mentioned, Joseph S. Jordan was acting as the agent

and representative of Clarence Grange, the Secretary of the Phoenix Savings, Building and Loan Association, and the money in each instance was received and accepted by said Senators as bribe money, with the improper and corrupt understanding upon the part of each of said Senators, in consideration of such payments, that his personal and official favor and protection would be accorded to said two corporations in their official investigation before said committee.

Therefore, as a conclusion, your committee is of the opinion that Senators E. J. Emmons, Harry Bunkers, Frank French and Eli Wright should be expelled from the Senate of the State of California, and so recommends.

Dated, Sacramento, February 20, 1905.

Respectfully submitted,

C. M. BELSHAW.
M. W. SIMPSON.
W. C. RALSTON.
M. DIGGS.
CHESTER ROWELL.

IN THE SENATE OF THE STATE OF CALIFORNIA.

IN THE MATTER OF THE

Investigation of Building and Loan
Associations.

By Special Committee consisting of Senators Woodward (chairman),
Anderson, Lynch, Hahn, and Curtin.

INDEX.

TESTIMONY OF—

	PAGE.
FIELDS, JAMES L.	5
Recalled	16, 57
GRANGE, CLARENCE	40
Recalled	64
KLINGER, WILLIAM M.	50
WADE, C. J.	86
SUGGESTIONS FOR AMENDMENTS TO BILL.....	103

IN THE SENATE OF THE STATE OF CALIFORNIA.

In the Matter of the Investigation of Building and Loan Associations.

By Special Committee consisting of Senators Woodward (chairman),
Anderson, Lynch, Hahn, and Curtin.

FIRST SESSION.

SACRAMENTO, CAL., February 7, 1905, 8 P. M.

(There being present only Senators Woodward, Lynch, Hahn and Anderson.)

THE CHAIRMAN: Is it the pleasure of the committee that we proceed to the examination of the witness?

MR. HAHN: I make a motion that this committee do adjourn until to-morrow afternoon at the adjournment of the Senate, in the Senate Chamber.

MR. ANDERSON: I will second that motion, but I would prefer to have the hour fixed at 5 o'clock.

MR. HAHN: I am willing to amend my motion to that.

MR. ANDERSON: Then I second the motion.

THE CHAIRMAN: The motion being made and seconded, it is so ordered, and the committee will adjourn until to-morrow evening, in the Senate Chamber, at 5 o'clock.

SECOND SESSION.

SACRAMENTO, CAL., February 8, 1905.

(All members of the Committee present.)

TESTIMONY OF JAMES L. FIELDS.

Sworn.

MR. CURTIN: Q. What is your name? A. James L. Fields.

Q. What official position in this State, if any, do you now occupy?

A. I am Secretary of the Building and Loan Commission.

Q. Who comprises that board? A. D. W. Field and Charles M. Shortridge.

Q. How long have you been the Commission's Secretary? A. Ten years next April.

Q. Ten years of continuous service? A. Yes, sir.

Q. At the time you accepted the position of Secretary, how many building and loan associations were there in the State? A. Well, I can tell that from the data which I have.

Q. If you have any data, please refer to it. A. The annual report for 1895 showed the total number one hundred and fifty-three (153), number of associations reporting one hundred and forty-four (144).

Q. Meaning by that that there were one hundred and forty-four associations in California, incorporated under the laws of this State, doing what we style a building and loan business? A. Yes.

Q. In what portion of the State. A. San Francisco.

Q. Were there many elsewhere? A. Oh, several in Los Angeles.

Q. And out of all these, one hundred and forty-four reporting? A. Yes, sir.

Q. Now, Mr. Fields, at that time when you went in as Secretary of the Commission, did you take any action turning on the investigation of the law under which these ten associations were doing business? A. Yes, sir.

Q. Have you kept in touch with that since that time? A. Yes.

Q. Now there being practically no change in the laws during the past ten years, what has there been, if any, in the methods of these ten corporations? A. None, sir.

Q. What are the names of these corporations? A. They are several.

Q. Name some. A. Renters Building and Loan Association; Standard Loan and Trust Company; Federal Safe Deposit Company.

Q. Are these the only ones you know of? A. These are the only ones I call to mind now.

Q. Then let me ask you: Do I understand you to say that these three companies are doing what is called a building and loan business but are not incorporated under the laws of the State relating to that class of business? A. They are doing a building and loan business, but are not incorporated under the building and loan laws.

Q. Do you perceive in the articles of incorporation anything tending to give them an abuse of power? A. Well, I can not say that there is very much in the articles of incorporation, although it gives them a chance to do business as a close corporation.

Q. Now understand me, what I ask you is if you perceive that there has been a more excessive power given to corporations formed since 1891? A. It would be better to express that in this way. While these corporations are not strictly under the building and loan laws they desired to come under the supervision of the Commission, and in order to do that the condition was made that they must make every borrower on their books a member or an investor in the same way practically as a shareholder in a building and loan corporation is an investor.

Q. Now, what do you mean by the condition is made? A. I mean that they must be a holder of an investment certificate.

Q. Who makes that condition? A. The Commission makes that condition as a condition that they shall be under supervision.

Q. Do you mean that this committee shall understand from this testimony that a building and loan association in California, not incor-

porated under the laws pertaining thereto, can come under the protection of the laws by complying with some conditions? A. The condition prescribed in Section 648 of the Civil Code.

Q. But what I want to get at is the condition now benefiting those corporations not incorporated under the law but which come under the supervision of the Commission? A. The only difference is that in one case, the building and loan association proper, every borrower is a shareholder, but in the other every borrower holds an investment certificate; I mean a certificate which is a participating investment on the same general lines and subject to similar conditions as shares of stock in building and loan associations of a similar kind.

Q. Now, I have no particular knowledge of the law in which I understand that a corporation can be formed for the purpose of issuing an investment certificate which shall entitle the borrower to become the investor in a building and loan association, but how does the shareholder participate in the profits? A. That is settled by the by-laws.

Q. Then a corporation, by its by-laws, has the option of allowing its members to participate in the profits or not? A. Yes, sir.

Q. Then what does he get for his money? A. Well, that I could not exactly say. If he buys class that issues investment certificates, he may not participate, perhaps, in the profits.

Q. Well, then, I understand that is to be settled by the corporation by its by-laws? A. Yes, sir.

Q. Well, what are these certificates usually named? What are they called? Bonds? A. No, sir.

Q. What security has the purchaser of the investment certificate? A. Only that afforded by the by-laws.

Q. Well, but they afford no security? A. Well, that depends—

Q. (Interrupting.) Well, in other words the agent represents that here is a bond of such and such a corporation, which carries with it a security, but which in reality is only secured by the by-laws of the company? A. I can not say what agents do.

Q. I am only asking you your experience from the necessary complaints that come to your office. A. Well, now, I can answer that positively. I do not believe there has ever been above a dozen complaints made to our office with reference to investment certificates. There are of course complaints with reference to the shares of building and loan associations on time.

Q. What is the nature of them? A. The nature is such, and is brought about in a large percentage, much the larger percentage of cases, by the failure of the investor or borrower to comply with the terms of his contract.

Q. Have you had personal contact or communication with such complainants? A. Yes, sir.

Q. What seems to have been the cause? Misrepresentation? A. It may perhaps be said that primarily it is caused by the agent rather than the borrower, because nine tenths of these complaints are on stock that is borrowed upon by investors who permit themselves to run delinquent, permit themselves to allow the taxes or insurance to be paid and do not reimburse the association for it. A time comes when the corporation advises the investor that the claim is subject to foreclosure. Then when he is called upon to make payment he finds that the interest and the other charges that are absolutely legitimate under the by-laws

have accrued to a terrible extent, and as a result generally then come the kicks.

Q. Now what has been your experience with regard to the number of people who fall down? Do you find that it is a result of borrowing the stock, or a failure to comply with the terms of the contract? A. The latter, as a rule.

Q. How frequently is it, if at all, that the by-laws of the association accompany the loan? A. Well, I can not say.

Q. Any part of the certificate give that information to the borrowers? A. The general terms are specified, but the full by-laws are not.

Q. Then, so far as you know, the only intimation he gets of the terms he gets from the agent who makes the sale? A. Well, I do not say that, because I presume that as a rule he could get a set of by-laws on application.

Q. But I am asking you what he gets. Now, you know that in the subpoena that was served upon you you were required to produce copies of all contracts, by-laws, conditions of purchase, etc., the reason being that we desired to gain some knowledge of all these matters. Now, what I am trying to get at is this, do you know of any instance where the purchaser of building and loan stock gets a copy of the by-laws with his contract? A. I can not say whether he has or not.

Q. Well, I speak from the nature of the contracts—— A. (Interrupting.) Well, I can not say.

Q. Well, do you know of any building and loan association or of any trust company that sells a share of stock on which are printed the conditions? A. They all print on them "Subject to terms of by-laws."

Q. Well, I understand that; but no by-laws are printed on any certificate. A. No, sir. But in some classes full conditions are there.

Q. Which? A. In the paid-up the conditions are all printed on them.

Q. How do you mean by that? Is there any association that you are aware of that makes that certificate of stock subject to conditions—— A. (Interrupting.) Well, they are subject to the terms and the by-laws.

Q. Now then, I come back to the proposition of by-laws. Now, in the paid-up stock the conditions are all on that excepting the general conditions of the by-laws. What has been your experience as to the paid-up stock afterwards? Is the fully paid-up stock always withdrawable to the full amount? A. Yes, sir.

Q. Now, supposing a man desired an investment certificate for \$1,000. When he desires to withdraw, does he get the full amount back except the interest forfeited? A. Certainly.

Q. The conditions of surrender of this class of stock are printed right on the back—now I ask you from your experience? A. No; a man gets his interest once or twice a year according to the contract.

Q. Well, supposing that in the meantime, say one day in the six months he desires to withdraw his account. Is he treated the same way as a bank depositor? A. Yes, sir.

Q. Now what has been your experience in relation to that? Is it universally the case? A. I have never known it to be any different.

Q. Now I received a letter from a party yesterday telling me that he

had paid into a fully paid-up — A. (Interrupting.) Now here is the idea right here. A good many people think that when they have paid in a definite number of monthly installments they have paid in full, a statement which is not borne out either by the literature or by the by-laws.

Q. What causes it? A. Well, just as I said in the first place. Primarily the cause is the agent's; and secondly, the fact that the investor does not look up the terms of his contract and know what he has to do.

Q. These are the true causes? A. Yes, sir.

Q. Now, do you know of any reason, or is it apparent to you from the examination of the Standard Loan and Trust Company, the Federal Safe Deposit Company, and the other you mentioned before, each of which you say was organized since 1895, do you notice any peculiar advantage they get? A. The only advantage that there is is that the shareholders have, by incorporating that way, made it practically a close corporation, and if their capital stock is fully paid up, the shareholders of investment certificates have as good a guarantee as a savings bank.

Q. Now do they use what you call an investment certificate? A. Yes, sir.

Q. Entirely so? A. Yes, sir.

Q. Now supposing that John Brown should purchase a thousand shares from the Standard Loan and Trust Company, what security has he? A. Only that provided for in the by-laws.

Q. Well, that results in what I am trying to drive at. All he has is a promissory note from the corporation, is it not? A. Well, in one sense, yes. He has got, just so far as that is concerned, what all building and loan associations afford.

Q. Then, in other words, the complaints come to you through purchasers suddenly becoming aware of conditions about which they claim they have never heard at all. A. Yes, sir.

Q. What does the Realty Syndicate call that which the purchaser gets from the agent? A. Some of them are called investment —

Q. (Interrupting.) Are they not called bonds? A. Never heard of them.

Q. Never heard of them? A. No, I never have.

Q. Do you never have anybody come and make complaint to you on that score? A. No, sir; because they are not under our jurisdiction. They are not doing a building and loan business.

Q. Well, I supposed that they were. A. We have no knowledge of it, if they are.

Q. Well, then, their business brings them under what jurisdiction? A. None whatever.

Q. None whatever? A. No, sir.

Q. Can you give any reason why they are so incorporated? A. I can not, sir; because I know nothing about them.

Q. Do you appreciate that as a defect in the present corporation laws of California? A. Well, it would naturally follow that it might be.

Q. Well, don't you appreciate that there must be one somewhere that permits this kind of company to exist? A. Unquestionably that has occurred to me.

Q. How long? A. For a long time.

Q. For what reasons? A. Well, I could not see how it could be brought about.

Q. Well, how have you heard these complaints? A. Why, from general conversation and reference.

Q. Now you stated some time back some corporations that were willing to abide by the supervision of the Commission. Can you state now why the other corporations do not do the same? A. Well the Realty Syndicate and others came to us and wanted to be under our supervision, but we absolutely refused unless they would conform absolutely with the laws governing such corporations as came under our supervision.

Q. Well, what advantage would there be for a person holding a share if he wanted a loan? A. No; not a disadvantage.

Q. Well, where is the advantage? A. The advantage is of having an extra—

Q. (Interrupting.) Well, have you ever known of any case in which that has taken place? A. Yes, sir.

Q. Well, now, that is what I am coming to; if the whole trouble—
THE CHAIRMAN (interrupting): I think that you should make the question where he knows they do participate in the profits. For instance, we have local building and loan associations in my own town that are doing this kind of business and doing it quite successfully and properly.

MR. CURTIN: Q. Well, let me give you an illustration. I know of my own knowledge that a man borrowed a certain amount of money from a certain corporation for a certain number of years—seven years—and the interest on it was represented to him as seven per cent, that is to say \$70. Now, adding the total together you should get the entire sum payable by working it that way; but it does not come out right. A. Why not?

Q. Seven per cent on \$1,000 is \$70. The interest for seven years is \$490, making a total of \$1,490. Now what is the rate of interest? I want to show you that it is not seven or eight or even nine per cent, but nearer fourteen per cent, before I get through. A. Well, I don't see how you are going to show it if it is figured out properly.

Q. Have you ever examined the books of the Pacific Coast Savings Society? A. Yes, sir.

Q. I understand that that society has gone into insolvency? A. I believe that it has.

Q. Well, before you get through I want to give you one more name. Now, what has been your experience along the line of where the interest is computed the way I have just been stating, so that a man owes so much more when he thinks he has half paid off his debt than he did at the commencement? A. Well, I have never known of a transaction of that sort in building and loan association business.

Q. Did you ever know of a borrower in a building and loan association who has kept his contract more than one half of the time and then draws out knowing how he stands at that time? A. Yes, he can know if he was borrowing under the definite-contract plan. He would know exactly from his book just how much he would have to pay in.

Q. How much has your experience been— A. (Interrupting.) Of course there is a difference between that and borrowing on the

installment plan and borrowing on the equal-payment plan. With the latter a certain portion of the payment goes to the credit of the member every month, the amount credited the member increases, the amount of interest decreases, so that when the last payment is made every dollar of it will be paid up. In the other plan the party borrows on ten shares of stock, for instance on \$100. If he is paying in on this at the rate of fifty cents a month and his interest besides, he can have the amount paid in credited to his loan at any time he wants to cancel it in a going association.

Q. Going associations? A. I mean one that is continuing business.

Q. How do you mean? A. Well, there are quite a number winding up.

Q. Well, I come back again to the proposition. How is an investor to get on to the exact terms of his contract? A. By referring to the by-laws.

Q. But suppose he lives a long ways from headquarters, how is he to obtain his knowledge of them? A. He can always get them on application.

Q. Well, but is there nothing marked on the certificate to suggest to him to keep to the by-laws, or is it not worded plainly—— A. (Interrupting.) So far as I know of there was no subterfuge.

Q. Take, for instance, the Continental Building and Loan Association. Suppose a man desires to borrow \$1,000. He has two or three ways in which he can do it? A. Two.

Q. State those two. A. One is to borrow in the usual way, and the other is to borrow on the definite-contract plan.

Q. Can he borrow anything without buying stock? A. He must have one share.

Q. Is the advantage in getting this one share with the association, or not? A. No.

Q. State the position. A. Section 638 (amended) of the law says that he must have not less than one share of stock, and the loans made on the definite-contract plan invariably carry one share with them so as to make him a shareholder in the company, as is contemplated. Now the definite-contract loans are just exactly as I state——

Q. (Interrupting.) The rate of interest is the same throughout the State? A. No, I don't think so. It is arranged according to the tax rates.

Q. Well, then, in this definite-contract plan a man borrowing \$1,000 has to be the holder of at least one share. Now, what does that mean? A. That means that the amount of money he agrees to pay each month on the terms on which he makes his loan, if paid for the number of months specified, will absolutely pay off that loan. Now it is different in the method explained before.

Q. Explain the difference. A. The difference is that the proper monthly payment is required by compound interest.

Q. At compound interest? A. Yes; the rate is always fixed at compound interest.

Q. Then, in other words, the definite-contract plan will, you say, work itself out in a given time. Is there no limit fixed on this time of payments? A. The borrower can take the number of months up he pleases.

Q. Well, the reason I ask is, the Pacific Coast limits it to seven—
A. (Interrupting.) All of them that I have ever seen make the borrower make his own time according to what he can afford to pay. Assume, for instance, that the rate is 10 per cent. That would be \$13.21—12 per cent on each \$1,000 per month for one hundred and twenty months. If he wanted to pay it up in sixty months—

Q. (Interrupting.) Now supposing that he gets the loan all paid up, what becomes of the stock? A. The rule is that where the stock is fully paid up he gets the benefit of it.

Q. Does he own the share? A. He certainly should, and I have never known of any case where he did not.

Q. Have you known of many cases where it has so occurred?
A. Yes.

Q. What has been your experience as to whether the borrower on their plan holds to the end of the contract? A. I could not say the exact percentage, but I should think that considerably more than 40 per cent would go clear to the end.

Q. Now give me this information. Take the statement that you made that the definite-contract plan is for the proportion of the time the loan is kept in force—same proportion to be considered paid. In other words, if that is figured for five years, what proportion should be paid in two and a half? A. In that case the operations of the interest effect a change. If you take \$100 instead of \$1,000 to be paid in five years it takes just about seventeen months, I believe. The percentage of interest is so worked that it leaves a smaller portion to go to the credit of the member at the outset.

Q. Well, is it not a fact that the way of figuring generally leaves the borrower, at half of the period expired, with more than two thirds of the debt still outstanding? A. Speaking—

Q. (Interrupting.) It runs in the same proportion of getting 50 per cent, and it takes over sixty or seventy months to pay the first half. Now take the same relative proportion for any other different time. Does the indebtedness, that is apparently—A. (Interrupting.) There is no indebtedness.

Q. Well I would like you to prove that to me. A. Well, I can exactly and mathematically.

Q. Well, where does all the misunderstanding come in? A. It arises from the lack of understanding the methods of calculation. Well, from a lack of knowledge.

Q. Well, but the companies know how to work them. A. No.

Q. Why? A. They buy the tables—

Q. (Interrupting.) But of course they use these tables. What kind of a table is it? A. It is a standard table, known the whole world over.

Q. Will you please tell us if you ever had any complaints at your office reaching out to anything of this kind? A. Now let me say to you right here that I have never had one complaint, to my knowledge, of that kind.

MR. CURTIN: Well I have no more questions to ask the witness at present.

MR. HAHN: Q. Senator Curtin asked you some questions a little while ago which did not bring out fully for me the knowledge that the stockholder gets when he takes his stock. As a matter of fact, do not

all the shareholders who buy on the monthly plan obtain pass-books, on which is printed the by-laws of the corporation? A. Yes, the larger percentage ought to be so. The larger associations do not all have them so at the present time.

Q. Is that a fact with the "locals"? A. Yes.

Q. Is it not a fact that the larger associations give sets of by-laws to their prospective stockholders? A. I can not say.

Q. Don't you know? A. No; many of them have different conditions relative to the laws printed in the pass-books.

Q. Now, with regard to bidding for premium stock. Has that become obsolete? A. Yes, sir.

Q. Are there any conducted in this State? A. None whatever.

Q. What proportion of building and loan associations conduct their business on any premium plan whatever, if you know it? A. The last annual report showed 126 associations reporting. Of these, 63 were on the installment premium plan, 4 loans and installment, and 5 loans alone; 54 with no premium.

Q. Then 54 associations did not have any premium plan as against 72. Now as regards the secretaries, Mr. Fields. At the present time what responsibilities have the secretaries of building and loan associations? A. In the "locals" the securities are almost entirely left in the hands of the secretary or treasurer. In the others there is a provision made in the by-laws for keeping them in some safe deposit, or they may be even kept in vaults.

Q. Is there any building and loan association in this State doing business where they deposit the securities with some trust company or bank for such a period of time until the loan is paid up and the mortgage discharged, and over which they have no control until the amount is paid off and the debt discharged? A. I have no knowledge of anything like that.

Q. Well, I don't mean that exactly; I mean where it is their custom.

A. Yes, it is the custom of some of them to keep them in the depository in that way.

Q. Do you know whether any of these associations that keep these securities under deposit require the depository under contract to keep them in trust for the stockholders for such a length of time until same shall be paid off? A. Some of the associations that are doing business in other States because of the requirements of laws of other States make their secretaries deposit their securities with some trust company for the benefit of the shareholders and depositors.

Q. According to the present system, as far as you know, is it possible for directors or officials of the companies to hypothecate for their own benefit the securities of their stockholders and of the company? A. Yes, of course; but it is very highly improbable.

Q. But could it not be done? A. Well, I do not say that it could not be done, but it would be very likely to be discovered.

Q. Well, could it not be done temporarily? A. Yes, it might be done between examinations.

Q. Well, would it not be possible for them to obtain the loan of such securities from the person who held them for your special benefit and you not know anything about it? A. Well, such a thing might be possible.

Q. From your experience as examiner do you believe that the directors of associations should retain the positions of secretaries of building and loan associations? A. I do; otherwise it would very materially hamper business.

Q. Well, could not the mortgagee be bound to hold the mortgage if there was such a law enacted, and be required to produce the same in case of necessity? A. I would consider it a very unwise provision, if done.

Q. Then you would have no better security? A. I do not know how, any more than a savings bank.

Q. But is it not a fact that building and loan associations lend money to their secretaries? A. They have done so in the past, but of course they have absolutely no right to borrow money on securities already pledged.

Q. But it has been done? A. It has been done in the past.

Q. Do you think it a good precedent? A. No.

Q. Has the Building and Loan Commission taken any steps to inquire into such matters as these? Has it had its attention called to such things? A. Yes, sir.

Q. Can not you tell me which company did that? A. Well, no; I can not really say.

Q. Have you no record? A. All we find out is on record in the office.

Q. Mr. Fields, our only object is—— A. (Interrupting.) If a law were drawn up prohibiting such a thing, it might be a good thing, possibly. I have always believed that the securities never should be pledged.

Q. What is the system you have been adopting in going round to make examinations of different associations? A. The usual practice for the last four or five years has been that one of the Commissioners shall go with me and he examine the securities in one room while I am on the books in another.

Q. Such discoveries as we were talking about before have been made? A. Yes, sir.

Q. But no record made? A. Well, I suppose a record was made at the time, but I don't know where I could find it; and if it was all settled all right, of course I might not think of it again. As I said before, nearly always one of the Commissioners is with me and he examines the loans and securities while I examine the books.

MR. CURTIN: Q. Coming back again to the question of interest, do you say that the method of simple interest employed by building and loan associations can be easily acquired? A. Yes; it is simply a question of absolutely a mathematical calculation.

Q. But under that rule there are certain allowances made for the member and also certain penalties—— A. (Interrupting.) But it will figure out correctly, however.

[Here Mr. Grange interjected that he had a complete book of tables in San Francisco, and that he would be willing to telegraph to have the same sent down here immediately for the use of the committee, which it was agreed he should do.]

MR. GRANGE: I would also suggest, informally, that you subpoena the Mercantile Trust Company, who hold in their possession a large amount of building and loan securities.

MR. CURTIN: Yes, but they might do the same as Mr. Corbin did, and refuse to obey the summons.

MR. GRANGE: Well, I do not think that they will do that; in fact, I rather think they would be glad to be summoned. The only reason they wish for a subpoena is for authority to bring these securities with them.

THE CHAIRMAN: Well, under those circumstances we might perhaps be glad to subpoena them. And probably the committee would be glad to hear formally from you, Mr. Grange.

MR. GRANGE: I should be glad to appear before the committee at any time convenient—

MR. CURTIN: I notice it is getting late and I think we had better adjourn.

MR. HAHN: Well, I am willing to sit here for awhile longer and get some more information.

MR. CURTIN: Well, I have had enough for to-night and move that we adjourn until 9:30 o'clock to-morrow morning, in room 16.

MR. ANDERSON: I second that motion.

THE CHAIRMAN: It having been so moved and seconded, the committee now stands adjourned until to-morrow morning at 9:30 o'clock, in room 16.

THIRD SESSION.

SACRAMENTO, CAL., February 9, 1905, 9:30 A. M.

Owing to there being no quorum, the Chairman and Senator Hahn being the only two members that attended, it was decided to adjourn until the hour of 5 o'clock P. M., in the Senate Chamber.

At that time, however, a majority of the committee coming together, it was decided to adjourn the meeting until the evening of February 13th, at 8 o'clock, in the Senate Chamber, and the committee forthwith adjourned.

FOURTH SESSION.

SACRAMENTO, CAL., February 13, 1905, 8 P. M.

Owing to the indisposition of Senator Hahn, and the absence of Senators Curtin and Lynch, it was decided by the other members of the committee that the meeting be adjourned until the evening of Tuesday, February 14, 1905, at 7 o'clock, in room 16 of the Capitol Building, and such adjournment was therefore taken.

FIFTH SESSION.

SACRAMENTO, CAL., February 14, 1905, 7 P. M.

(There being present Messrs. Woodward, Anderson, Hahn, and Curtin.)

TESTIMONY OF JAMES L. FIELDS.

Recalled.

THE CHAIRMAN: The committee will come to order. Mr. Fields, I believe you have already been sworn.

MR. HAHN: Q. You testified the other evening that you were Secretary of the Building and Loan Commission. Now, what is your salary? A. \$100 a month.

Q. What is the salary of the members of the Board? A. \$200 a month.

Q. Now, what time are you supposed to give to the business of the Board in their San Francisco office? A. The regular banking hours of San Francisco—from 10 o'clock until 3, and on Saturday from 10 o'clock until midday.

Q. Now, when you are not engaged in your duties as Secretary of the Board, what do you do? A. I go out doing expert work for different corporations.

Q. Then are you ever employed by any building and loan associations out of office hours? A. Yes, sir.

Q. About how many associations have employed you out of office hours? A. Well, I could not say as to the number; perhaps eight or ten.

Q. Eight or ten in the State? A. Yes, sir.

Q. You have compiled a set of tables on which to base profits and losses, which is in pamphlet form, have you not? A. Well, what do you have reference to in that respect?

Q. Well, I mean that you have made a system upon which to figure out the profits and losses of building and loan associations. A. Oh, you mean a rule? Yes, there are several.

Q. But I mean that you have one that you have perfected. A. Yes, sir. It is the one generally known as the Dexter rule.

Q. Well, is it not a fact that you have some such rule and also tables for figuring out definite-contract loans? A. Yes, sir.

Q. And you sell them? A. Yes, sir.

Q. How much do you get for them? A. Well, \$5 or \$10—it varies according to—

Q. (Interrupting.) Do most of the associations in the State use these tables? A. Something over or about one half have called for these tables.

Q. Now, how much time do the Building and Loan Commissioners give to the examination of building and loan associations? A. That is a hard thing to say.

Q. Now, I will give you the reason first for asking the question, and that will probably facilitate future answers. We want to know

whether or not building and loan association business can be investigated by one commissioner and a secretary, or whether it necessitates taking up the whole time of two commissioners and a secretary for the examinations of these associations. A. Well, I could answer that question better if I were not connected with the Commission.

THE CHAIRMAN: Well, I appreciate that that question puts Mr. Fields in rather a delicate position and his answer might —

MR. CURTIN: I do not see how he is in a delicate position at all. We have got him here questioning him as an officer of the State of California, and I can not see that his answering any questions put by the committee with the idea of making better legislation for building and loan societies, or the Commission either, for that matter, can place him in such a position. I do not see why he can not answer the question.

THE CHAIRMAN: I would suggest this question, Mr. Hahn. How many associations have been examined during the past year? A. All.

Q. Who examines them? A. As a rule it is done by D. W. Field and myself.

Q. How many did Mr. Field examine? A. Well, he always goes with me when in San Francisco—we go together; and when I am in the south we go together all the time. You might say that we are together at all the associations in Los Angeles and everywhere south. We were together at almost all of the associations in San Francisco—of which there are now 57, I think—Oakland, Alameda, all up through the Sonoma Valley, Sacramento, and Stockton—we have been together all the time.

MR. HAHN: Q. Well, what proportion of the associations were examined by Mr. Field and yourself? A. Practically all.

Q. Practically all? A. Practically all; yes, sir.

Q. Is it necessary when an association is examined that two of you should go together? A. Well, it is not necessary for the smaller associations, but for the larger associations it is very desirable for the two to be together.

Q. Now if your salary as Secretary of the Commission were more than \$100 per month, would it be possible for you to keep busy both in and out of office hours and not give any of your time to any other line of business? A. Yes, sir.

Q. Will you kindly state what that would be and how you could be kept busy in the office? A. Well, there is always plenty to do; I never found any time when there was not; and while I say "office hours," I am usually in the office a few minutes after nine, and in summer time often as late as 5 o'clock in the afternoon. In fact, I am there considerably in excess of office hours as a general rule, except of course, when I am out making examinations.

Q. I see. A. In fact, I always find something to do.

THE CHAIRMAN: Mr. Anderson, do you wish to ask the witness any question?

MR. ANDERSON: Well, Senator, I think that I would. Q. I was wondering—Mr. Fields, have you one of those tables? A. Yes, sir.

Q. Let us have it, if you please. A. Yes, sir.

Q. Senator Hahn asked you, Mr. Fields, if you had worked for any of these building and loan associations for personal gain. State which

of them you worked for. A. I have done work for the Sacramento Association here in Sacramento.

Q. The Sacramento Association? A. Yes, sir.

Q. The legal name of it? A. The Sacramento Building and Loan Association.

Q. What others? A. The San Joaquin Valley Association in Stockton, the Continental Building and Loan Association, the Los Gatos Association, The Encinal of Alameda, for the Pacific States some four or five years ago, for the Security (which is now gone out of business), for the Capital (which is now out of business), for the Pacific Coast Savings, for the Bankers' Loan and Trust Company, and for the Protective of Los Angeles.

Q. What is the legal title of the Protective? A. The Protective Mutual Savings Building and Loan Association. In this last I instituted a proper system of accounts for the keeping of their books.

Q. Any others? A. I can not call to mind any others.

Q. Which one did you most recently examine? A. The last.

Q. I don't mean examined: I mean worked for most recently. A. Well, the last two about the same time. I have also worked for one in Stockton, the San Joaquin and Pacific Coast Savings Society.

Q. What compensation would you get for this work? A. I would get different compensation, according to the class of work I was doing. It might be in some cases at the rate of \$10 a day; in other cases I might be getting a per diem as high as \$20 and \$25; sometimes even \$35 a day. Such work as these tables is worth \$25 per day.

Q. How recently did you perform any services for the Protective Mutual Building and Loan Association of Los Angeles? A. I worked up a system of accounts for them before I went down there in last November. I got the system worked up and took it down when I went down there.

Q. Are there any of these associations, Mr. Fields, for which you perform labor for compensation, that you have had any reason to report to the Commissioners adversely on? A. The Pacific Coast Savings Society.

Q. The only one? A. Yes, the only one lately.

Q. At any time? A. Oh, away back seven years ago I did some work for the Union here and reported adversely on it.

Q. That is out of business now? A. Yes, sir.

Q. Then you reported adversely on them? A. Yes, sir; and put them in the hands of the Attorney-General.

Q. Mr. Fields, you stated that with the smaller associations it was not always necessary for any Commissioner to be with you. What is the difference, so far as the examination is concerned, between the smaller and the larger ones? A. Well, the only difference is that the smaller associations take only a short time to get through with an official examination. The examination can be gotten through usually without any trouble and it would usually be entirely unnecessary to have two people conducting the examination. With the larger associations, however, the work is immense. Take, for instance, the State Mutual of Los Angeles. That takes all the way from three to five days to get through with it. With most of the smaller ones you can get through in one day.

MR. ANDERSON: That is all I have to ask on that point.

MR. HAHN: Q. Now, Mr. Fields, with regard to the business of building and loan associations in this State. First I would like to ask you if you think that the building and loan business is safely conducted in California? A. Yes, sir; it is.

Q. Are there not in the State of California, building and loan associations doing business upon an insecure basis? A. I don't know of any.

Q. You don't know of any? A. No, sir.

Q. Are there any building and loan associations in California doing a business very similar to a banking business? A. Well, in some respects there are some that come very close to the savings bank system.

Q. Do you believe that such encroachments upon the business of the savings banks is injurious to the building and loan association business? A. I don't know that it is injurious, but I think that building and loan associations certainly ought not to encroach too close to the lines of a savings bank business.

Q. Why? A. Well, because they are operating under a different plan, and of necessity should be doing a somewhat different business. Still, as the building and loan associations are doing a savings business and are for the accumulation of savings, it is in the nature of a mutual savings business, but not as conducted or supposed to be conducted by the savings banks of the State.

Q. Then they do not do entirely a similar business? A. No.

Q. That is what I had reference to. A. The idea is, that if they encroach too close on the savings bank business, the savings banks may raise the objection that they are interfering with their business.

Q. With regard to the practice of building and loan associations, relative to the balancing of their books, is there any system now that is in effect in this State that all the associations adopt relative to this? A. Well, I understand by that, is there any system either daily, monthly, or annually?

Q. Yes; that is it. A. Well, there is no more universal system of keeping accounts in that business than there is in other businesses doing work of a similar nature but under different conditions. With reference to balancing up their business, almost all the associations in the State have their posting all done on their books once a month, and balanced.

Q. Now, would it not be better if they had them balanced the same as a bank does? A. I don't know that anything would be gained by requiring such a thing.

Q. Do you know whether any associations balance and write off daily? A. Yes; some balance every day. Of course the cash is balanced up every day just as in any business, but—

Q. (Interrupting.) I understand that the cash is balanced every day, but not written off finally. Could you name some that balance the cash and write it off every day? A. Well, the Phoenix, the State Mutual—they balance their cash every day; in fact, I imagine all the associations, as I said before, balance their cash every day, but without ruling it off. But most of them, I think, especially the larger ones, know their balances a good deal oftener than once a month, even without the postings.

Q. I understand. Is it not a fact that the building and loan associations have a prescribed form for making out statements? A. Yes, sir.

Q. Is that universally required now by all associations? A. Yes.

Q. Any associations that do not use it? A. No; I never heard of any.

Q. I ask if all of them send them in? A. All send them in.

Q. When you examine the securities of a building and loan association, have you any way of detecting the character of the security other than what may appear upon the mortgage itself? A. No; there is no way that any one going in and examining can determine if there is any irregularity in that respect, provided that the report of the association's attorney is on it.

Q. Do you require from each applicant a statement of his financial standing? A. Yes; certainly.

Q. Now, I mean individually. For instance, the individual who applies for a loan of say \$1,000, the association does not require that applicant to make a statement as to what his security consists of? A. There is no requirement of law for anything of that sort.

Q. Do you know of any associations in this State that you examined that made a loan greater in amount than the security they received for the loan? A. Well, yes; I know of one: the Pacific Coast Savings.

Q. Will you please state what experience you had with regard thereto? A. Well, the first information that came to me was in such a way that started a certain investigation on a certain piece of property. That developed then into an investigation of a lot of loans, which, on looking them up, proved to be dummies of the president; these took up a mortgage, and all the papers connected therewith were signed M. Nelson. Now that name was signed to all the papers and you would have sworn for all the world that everything was all right. The investigation proved, however, that it was simply the stenographer of Mr. Easton. The property was in California, about 86 acres of land.

Q. What was the amount of money loaned? A. \$10,000.

Q. And the value of the security? A. The value was appraised on the application at about \$15,000.

Q. What was the actual worth of it? A. About—not to exceed \$4,000. That investigation was certainly an "astonisher."

Q. Have you any remedy to suggest whereby we can correct any such abuse in the building and loan system? A. The only remedy that I can see is to provide a penalty for the officers of an association for making loans on insufficient security. As a matter of fact, in this particular instance the president of the association was interested in this loan.

Q. Then, what has been done in regard to making loans to directors? Don't you think it might be a good plan to pass a law prohibiting that? A. I should certainly be glad to see a law go on the statute books prohibiting loans to any directors or officers of the company.

Q. Now, Mr. Fields, with regard to the method of building and loan associations loaning out their money. Is it not a fact that most of them, where the money is not loaned out upon the definite-contract plan, insert in the note a certain amount, either in dollars and cents or in percentage, representing interest, and also another amount representing premiums? A. That is not the practice at the present day.

It used to be under the old gross-premium system, but those associations that use interest and premiums at the present time, perhaps some few do use interest at a low rate; and that low rate together with the premium would make perhaps the regular rate of interest that they would charge without the premium on the installment plan.

Q. Now, from your experience would you suggest that building and loan associations be compelled to amend their by-laws, eliminating therefrom all premium plans? A. I think it would give a great deal better satisfaction: that is to say, by having a specified rate per cent or a specific number of cents per month per hundred dollars.

Q. Now, as a matter of fact, Mr. Fields, have you not found, in your experience, that almost all of the misunderstanding of investors in building and loan association stock comes about by reason of this premium plan? A. Not so much as regards the installment premium, excepting some seven or eight years ago when two associations, which were using what was known as stock premium, created an immense amount of dissatisfaction everywhere. It was only used by two associations some seven years ago.

Q. Will you please explain that plan? A. Well, the stock premium represented that if a party wanted to borrow \$1,000, for instance, he subscribed for ten shares of \$100 each of ordinary investment stock, on which the rate of interest was given as 6 per cent per annum; then he subscribed for ten shares of premium stock, which stock was assigned absolutely to the association in lieu of a premium, and at the rate of a definite number of cents per share in lieu of the dues payable on premium stock. That premium stock always created trouble, an immense amount. Only two associations tried it—the Pacific States and the Guarantee Investment. The Guarantee Investment Company went out of business six or seven years ago, and the Pacific States took up the regular installment premium.

Q. Now, Mr. Fields, do you know of any other association in this State where the amount of money loaned was greater than the amount of security received by the association? You referred to one that did this, the Pacific Coast— A. (Interrupting.) I can not say I know of any; no.

Q. Do you know of any association in this State where the securities have been used contrary to law? A. I can not say that there—

Q. (Interrupting.) Do you know whether the Continental Building and Loan Association have ever had their securities misused in any way? A. Not to my knowledge.

Q. Not to your knowledge? Did you not make an examination of that association last month? A. I made an examination of the books and the securities myself.

THE CHAIRMAN: Q. Mr. Fields, is that the examination that was published in the newspapers, signed by you and Commissioner Shortridge? A. Yes, sir.

Q. And that signed report was based on your examination? A. Yes.

Q. In other words, the two Commissioners who signed the report did not make the personal examination? A. Well, they were not in the same room as I was.

Q. Were they in the same building? A. They were.

MR. HAHN: Q. Now let us take the Continental for an example. I

wish to purchase some stock, ten shares. How much will it cost me?
A. Well, you mean as a membership fee?

Q. Well, I want to get in. I don't know anything about the business; I come to you and suppose you to be an official of the company selling stock, and I wish to buy ten shares. A. Now, that would depend on the kind of stock. On monthly payment stock, known as class "F" stock, the payment would be 50 cents a month.

Q. So if I take ten shares I would pay \$5? A. The first payment you would pay \$10 membership fee.

Q. Anything else? A. Then every month you would pay \$5 a month.

Q. Well, would I not pay \$5 for the first month? A. No; the other payment is payable at the end of the month instead of in advance: say the stock was subscribed for to-day, the next payment would fall due on the fifteenth of March.

Q. After that I will have \$5 to pay? A. Right along.

Q. Now then, how much money would I get back for monthly payments when that stock matures? A. \$1,000.

Q. When would I get it back? A. Well, whenever it matured.

Q. When would that be? A. That question is one depending entirely upon the profits.

Q. Then the Continental in none of its literature attempts to state when it will mature? A. They do say regarding their class "A" stock, but regarding their class "F" I have never seen anything that would indicate and exactly determine the time of maturity. They may estimate the time, which I think that they do from 114 to 120 months, I have forgotten which. I think myself that it would probably actually mature in from 126 to 130 months.

Q. Now then, I will ask you this: How soon after a person buys can he withdraw and receive back what he paid in? A. Well, I believe after twelve payments have been made.

Q. After twelve payments he would be able to give notice of withdrawal and get back \$60? The \$10 membership fee would go to the association? A. Yes, that is never returned. The time of maturity depends on the interest; with 50-cent payments, if it was credited up at the rate of 8 per cent it would take about 127 months, if 7 per cent about 133 months.

Q. Then they have underestimated the time within which they could reasonably expect this stock to mature. A. I think that probably they do if they say 114 to 120 months. I won't say positively that that is the case, but if they do stipulate it at that, then it is as a rule underestimated.

MR. ANDERSON: Q. I want to ask you about a bill which I believe was, and at present is, before the Legislature.

MR. HAHN: Let me finish. Has that association any other kind of stock besides the "F" stock? A. They have the fully paid-up stock. They have no monthly payment stock. They are trying to sell their class "A" stock, Mr. Corbin told me a year ago, but had not sold any of it since about the first of January a year ago.

Q. What is the class "A" stock? A. With the class "A" stock the monthly payments are 60 cents a month, with \$1 a share membership fee. From the monthly payments the by-laws provide that 10 cents

be taken out for expense fund, 50 cents being credited to the shareholder.

Q. Then the class "F" stock is the better stock of the two?

A. Well, yes; much more satisfactory.

Q. Why did they discontinue selling the class "A" stock? A. I don't know.

Q. Have they any other stock paid up monthly? A. Yes, the insurance stock.

Q. What is that? A. Well, that is like class "A" stock.

Q. Sixty cents a share? A. It is really 30 cents a share, except such as may have been changed from class "A" stock to class "F" stock. That is still continued as 60-cent payments, and the party then takes insurance with that, and out of his monthly payments a certain amount is in proportion charged up against his stock for the carrying of the insurance premium.

Q. Well then, as a matter of fact that is nothing more nor less than an insurance scheme? A. Well, no; because they buy the insurance from some Eastern insurance company.

Q. Well, what I mean is that they are just getting business for the insurance people. A. Yes; that is so.

Q. Have they sold very much of that stock? A. No; very little.

Q. Why? A. I don't know why; but the secretary told me the other day that they did not sell any of it for nearly a year.

Q. Do you think it is good policy to connect insurance stock with building and loan associations? A. Well, perhaps generally speaking, no; I never looked into it myself very much.

Q. Well, what other kinds are there? A. The fully paid-up stock.

Q. What do they pay for that? A. The full par value paid in, with 6 per cent interest on one hundred shares.

Q. How about the withdrawal in that case? A. He can withdraw all the money within sixty days, but he forfeits his dividends.

Q. And he gets back the full amount? A. Yes, sir.

Q. What about the class "A" stock? A. With that class for which is paid 60 cents a share, on withdrawal only 50 cents is returned, less \$1 already paid in and also \$1 membership fee.

Q. What period of time after purchasing the stock can he withdraw? A. After twelve monthly payments.

Q. Any other kind of stock they are selling? A. I don't call to mind any. There may be. I think there is none that is active; in fact, there is none being sold except the fully paid-up and the class "F."

Q. Do they employ agents? A. Yes, sir.

Q. What do they pay them? A. I don't know.

Q. Don't you know whether it is according to the amount of stock they sell, or whether they get a monthly salary? A. No, I do not, because that item is never entered on the books.

Q. I see. Now, Mr. Fields, you have heard a report that Mr. William Corbin, of the Continental Building and Loan Association, in the past used certain securities of that association for his own benefit, either temporarily or otherwise, have you? A. I have seen something in the papers with reference to it.

Q. Is it possible for Mr. Corbin to have done so? A. Well, I suppose it was possible.

Q. Well, we will ask whether it was probable. A. It was possible and probable that something of the sort did occur.

Q. Can you suggest any remedy whereby such practices would be a thing of the past and impossible to occur again? A. The only idea that suggests itself to me is that there be a penalty provided for loaning any money to any officer or director.

Q. You don't believe then that it would be practicable to so place the securities of building and loan associations that an official, whoever he might be, could not possibly be tempted? A. I don't think that it would be any more possible than with a savings bank.

Q. I think I asked you the other day whether there was any building and loan association that did that at the present time? A. Well, you asked me if they had them so placed with the trust company that they could not be withdrawn until paid or exchanged. My answer was that certain ones did so outside of the State.

Q. Are there any in this State that do that? A. Well, they are all California corporations; there are no foreign corporations doing business in the building and loan line, but these particular ones are doing business in other States. For instance, a San Francisco corporation doing business in Washington, Oregon, or Arizona.

Q. Name some of these, please. A. Well, the Pacific States, the Renters', the Phoenix; and in Los Angeles I think that the State Mutual is doing business in Arizona. At any rate it used to.

MR. HAHN: That is all for the present.

MR. ANDERSON: I desire to ask Mr. Fields a few questions about and touching the bills now before the Legislature for amending the building and loan laws and the Commissioner Act.

MR. ANDERSON: Q. Have you seen the bills? A. I have.

Q. Have you seen the bill providing for stockholders to withdraw from the corporation on giving thirty days' notice? A. Well, that is just one clause. Yes, I think I saw it last evening for the first time. As I recollect it that was the same bill that was attempted to be grafted on to the Commissioner Act, and which has since been pronounced to be unconstitutional.

Q. What I am asking you is, is the bill meritorious and should it pass? A. Yes, I think it is.

Q. Are there any of these associations in the State that pay withdrawals on sight or on demand? A. Yes, sir; quite a number.

Q. How many would there be, do you suppose? A. Oh, about two thirds of them do it.

Q. That is quite a few; it must then be practicable so to do. A. Yes, sir; I think that it is.

Q. Are there any that refused to pay order of withdrawal in less time than one year? Did I understand you to say that? A. Yes, sir; but there is quite a number that permits them to withdraw in less time.

Q. Now, are there some associations that do not permit them to withdraw? A. Yes; there were several.

Q. Well, what I want to get at is, if there are many or how many there might be? A. Well, I could not say how many there are that have that provision in their by-laws. I can not carry that in my mind.

Q. Well, I am satisfied to have your opinion. I think you stated that it was a good bill. A. Yes, sir; I think that it is meritorious.

Q. Well, they all ought to allow their stockholders to withdraw on thirty days' notice? A. It is a question of policy whether or not they should be allowed to withdraw within two or three months.

Q. Well, doesn't this bill provide for a thirty days' notice? A. But the general idea in contemplation in a bill of that sort is not that they are going to withdraw right off—two or three months after joining—especially if they expect to receive anything more than they have absolutely paid in, and do not contribute to the expenses of the associations in some form.

Q. Mr. Wade, will you kindly give me one of your publications I got in your office the other day—that card I was looking at to-night. You say that they should not be allowed to withdraw? A. I say that it is a question of policy whether or not they should be allowed to withdraw in two, three, or four months after becoming a member, and still draw out all they have put in without contributing any sum whatever toward expenses. In other words, if they did not pay any membership fee and there was no expense deduction, and they had paid in \$5 monthly for five months and then drew that out entirely at the end of five months, there has been an expense to the association in the conducting of the business, selling the stock, stationery, etc., which would not be repaid, and therefore it is a question as to whether they should be required to stay in for a year, or whether they should, if they draw out in a shorter time, contribute something to such expenses.

Q. I fail to understand your logic. How do you say that you favor the bill? A. I favor the bill; but I understand that if it were put into practice it would allow parties to withdraw in four or five months and pay nothing toward expenses. Well, there should be something to provide for a pro rata of expenses on the short-time withdrawal.

Q. Are there any associations, within your knowledge, that comply at the present time with the proposed bill? A. Several of the "locals"; yes, sir.

Q. Why not all? A. Well, some think they can; others think not.

Q. What do you think? You are our expert. A. Well, that is putting up a pretty hard business deal.

Q. Well, Mr. Fields, but you see— A. (Interrupting.) There are perhaps, you might say, two kinds of experts—the expert of calculations, and the expert of practice.

Q. But your answer is not satisfactory? A. Well, I suppose that that is why they don't do it, because they think they can't.

Q. Well, do you think they can't? This committee has only one object before it, to fix the laws aright. A. Well, if they have a membership fee I should say, yes, they could do so by the forfeiting of the membership fee.

Q. Well, what should it be? A. Well, the membership fee—of course it is open to discussion what the membership fee should be—

Q. (Interrupting.) Well, what is your idea A. At the present time it varies all the way from 10 cents to \$2 a share.

Q. I understand that it does, but what I want to know is your experience. As Secretary of the Building and Loan Commission, what are you going to advise this committee to do? A. Well, all I can say is that some very large associations have made a success of a \$1 membership fee.

Q. Well, state one that has done that. A. The State Mutual, the Pacific States—

Q. (Interrupting.) Then if one or two can do it, why not all? A. I don't know why they should not.

Q. That is satisfactory. Now, I did not quite appreciate the termination of the examination of why officials of a corporation should not be allowed to borrow on securities of the association. You gave your idea to Senator Hahn. If the official were dishonest, would it not be just as easy for him to loan the money to somebody else without it being in his own name? A. Unquestionably it would.

Q. Well, how would you prevent that by passing a law forbidding it, when it would anyhow only be a question of honesty or dishonesty? A. Well, I don't know that there would be anything gained by it, because it is just the unquestioned proposition that the man who is dishonest will anyhow be dishonest, and you can't help it.

Q. Then such a law is absolutely useless.

MR. CURTIN: Q. Now, Mr. Fields, when you say that, let me put a proposition to you. In the first place, is not the director, under the bill, in the double capacity of borrower and lender? In other words, does not the law require him to so place himself that he may not give his— A. (Interrupting.) Now, you are asking me a legal question; and because of the fact that I make no claims to being an attorney I can not say that I am familiar with the law on that point.

Q. But is not that the very foundation where the trustee may not borrow of the trusted funds? A. As I understand it, that is the foundation.

Q. Well, then, is that not the law with regard to savings societies? A. I can not say.

Q. That is the law in the Code, and the object is that the trustee may not yield to temptation.

MR. ANDERSON: Q. Now, Mr. Fields, I am reading from the last report of the Commissioners of Building and Loan Associations—the report of 1894. Well, suppose that I use that for reference? I have a more recent one here, but that will cover my purpose. I see that the percentage of salaries paid out in "locals" is 1.46 per cent on an average, and in "nationals" it is 3.80 per cent.

THE CHAIRMAN: What does that refer to?

MR. ANDERSON: Well, I mean 1.46 per cent in the "locals" and 3.80 per cent in the "nationals." Now, I can not understand why there should be that difference in that portion of the expenses of these associations. Could you explain? A. Well, so far as the 1894 reports are concerned I can not tell.

Q. I ask as to the general principle. A. All I can speak of is what I have figured on myself and put in the annual report of the Commission to the Governor.

Q. I don't care anything about reports; I am getting at general principles. Is there any reason why the percentage should be greater in the case of the "nationals"? A. What page is that on?

Q. Page 70. A. I want to see how it is, and then I can tell better.

Q. What I am trying to see is if there should not be introduced a law in this Legislature covering that point. A. Well, I know that there was as great a difference as that at one time.

MR. HAHN: Q. Are they not paid in this proportion today?
A. Well, I can not tell.

Q. Well, I am advised that they are.

MR. ANDERSON: Q. I have not got an answer to my original question yet. Why should there be this difference? A. Well, possibly the taxes may have something to do with it. The taxes in the southern part of the State are paid at a different rate than in the northern part.

Q. Well, how does that result? A. Because down there everything is included; the borrower pays the taxes and he pays a net rate of interest.

Q. The borrower pays the taxes? A. Yes, sir.

Q. On the mortgage? A. Well, yes. Here is the idea: if they want a net rate of interest of 7 per cent say, and the taxes are $2\frac{1}{2}$ per cent, they will make the mortgage and note for 10 per cent.

Q. And that does not violate the law? A. No. The arrangement is that the borrower, by paying 7 per cent monthly —

MR. ANDERSON (interrupting): Well, just proceed with your explanation.

A. Now, based on the last annual report made to the Governor, taking out ten associations that charged \$1 or \$2 a share membership fee, classing them together, and all the rest as purely "locals," I have the following figures: Salaries and other expenses to average loans in force, "locals," 1.84 per cent; the same for so-called "nationals," 3.86 per cent.

Q. Well, that is about the same. A. Or putting them all together it would be 2.77 per cent in salaries and other expenses for the "nationals," and 2.06 per cent for the "locals."

Q. Now, Mr. Fields, would it be practicable and advisable, in your mind, to introduce a bill in the Legislature limiting the percentage paid for salaries? A. That is a hard question to answer. Lots of these things theoretically are all right, but practically won't work.

Q. Do you think it advisable and practicable that we should enact some law limiting the percentage of total expenses of these building and loan associations? A. I don't know whether it would be practicable or not to cut the figure as you suggest.

Q. As a matter of fact, Mr. Fields, I imagine that the corporation with the larger scope is able to get business cheaper than the other associations? A. That is right. To a great extent; yes.

Q. Now, you say that some associations charge an admission fee of \$1 and had made the business pay out of that. A. I did not say exactly that. I said that several of the larger associations were doing business on that plan and making a success out of it.

Q. Well, if they have that, should there also be a withdrawal fee? A. I absolutely do not believe in any other fees at all. I have said time and time again, in speaking of these different classes of associations, and have advised the associations time and time again, "Drop your expense fund and put your membership fee at \$1 per share."

Q. Then don't you agree with me absolutely that there should be some law enacted to enforce a maximum entrance fee to these building and loan associations, and no withdrawal fee? A. I do, absolutely.

Q. I am very glad that you agree with me on that.

MR. CURTIN: In other words, the association gets him both going and coming.

MR. ANDERSON: Q. My only object in this investigation is to remedy the laws in this building and loan business. Now, I want to ask you three or four questions along the line of this, and then I am through with you. Eliminating this objectionable feature from the proposition, would you consider building and loan associations more or less secure than savings banks? A. With conservative management I don't see why they should not be every bit as secure. And now, right in this connection permit me to say this: At the other examination the question of security never was raised at all; the question of protection was raised and I said that certain ones had the protection of their by-laws. All shareholders in any corporation have the protection of the State laws. But protection and security are two quite different things. Aside and in addition to that protection of law and by-laws, in building and loan associations and savings banks they have the security of the pledges secured by notes, mortgages if you please, or other securities taken for the loans made, which, if properly made, should pay dollar for dollar every dollar of the liabilities.

Q. Now, do you think it a wise policy for building and loan associations to permit of a deduction from guaranteed payments to provide for running expenses? A. No, I do not.

Q. I am glad that you agree with me on that point also. Now, the only thing sticking in my mind is this: How are you going to get over the first year's business and the expenses of a newly organized company? A. By having a membership fee, say of about \$1 and using that to get all new business.

Q. Yes, I see. A. With the distinct understanding that that dollar is never to be repaid.

Q. Do you consider it good policy to deduct the membership fee from the first payment that is made? A. No; I do not. I think that it should be paid in advance in cash, and then every dollar that comes in afterwards should be credited to the purchaser or borrower and no deductions made.

Q. Then do you think that it is possible to build up a large building and loan business with a membership fee of \$1, that is, to pay the current expenses? A. Well, such a thing has been done; and what has been done I believe can be done again.

MR. HAHN: Q. But the times, conditions, and locality have a great deal to do with it? A. Well, they might.

Q. And as a matter of fact the number of stockholders originally in the concern have a great deal to do with the matter? A. That is very probably the case also.

MR. CURTIN: Q. Senator Hahn asked you if the specific-rate plan was adopted, would not better results obtain? A. You mean a specific rate of interest?

Q. Yes; he used the term "specific rate"—the definite-contract plan of loan. A. So far as that is concerned as between that and the ordinary plan, there is no difference between the income of the association if the same rate of interest is used and the money is kept loaned out.

Q. Well, is there not one advantage that the company has nothing— A. (Interrupting.) Allow me to see that table right there. Now, for

instance, this is a 9 per cent table, and the party wants to borrow \$1,000 for one hundred and twenty months.

Q. That is to say, for ten years? A. Ten years, and it is going to be 9 per cent interest. Now this proposition for interest and principal in conjunction with each monthly payment would be \$12.67 each month. Now, in that time it would be \$1,520.40, of which \$1,000 will be principal and \$520.40 will be interest.

Q. Now, just a moment while I reckon that out. Now, out of that \$1,520.40, \$520.40 is interest. A. Now, at the end of the first year he will have paid \$84.36 interest and \$64.68 principal. Now, under this idea the interest decreases every month about 4 cents, and the principal credited increases about 4 cents; it thus keeps getting more. Now the question was asked me the other day for a calculation at the end of sixty months. At that time one half of the total payments will have been made, and of that \$370.27 will be interest, and \$389.93 will be principal.

Q. Now, right there is what I want to get at: the advantage to the lender in case the borrower desires to surrender his contract. A. How so?

Q. Well, don't these figures prove that? A. No, sir. Because he has paid just simply 9 per cent interest, the monthly balances all remaining unpaid, and it will figure no other way than simply so much proportion interest and so much proportion principal.

Q. Is that arbitrary or mathematical? A. That is absolutely a mathematical calculation.

Q. Therefore, at the end of the sixty months \$370.27 is interest and \$389.93 is principal. Do I understand you that way, and that that is a mathematical calculation? A. Absolutely a mathematical calculation and it is worked out by an algebraical formula. Of course this rule has only been in vogue with building and loan associations in this State since the spring of 1900, because this was first devised in October, 1899. The first idea of working this so as to apply it in conjunction with building and loan business was figured out in October, 1899, and the first association that ever used this was one of Charlie Mallett's associations in the Mills Building, and about February, 1900, possibly, the tables were gotten up and worked out.

Q. And from mathematical demonstration no injustice is done in this way to the borrower? A. No, sir. These tables have been in use in the savings banks of San Francisco for twenty years or more, so that would speak for them.

Q. How does the question arise, that is made by the borrower, of the fact that after one half of the period has expired he has more than one half yet to liquidate, so far as a mathematical calculation is concerned? A. Well, permit me to try and explain. Supposing that you are desirous of borrowing \$1,000 and take five shares in a "local" association, let us say. It is \$1 a month to pay in; or you might, what would result in the same thing, take ten shares with 50 cents per month payment, and for each dollar paid in the net profits credited up to the shares was 10 per cent annually compounded. In ten years the shares would mature, but at the end of five years the value of these shares would be only \$77.23 against \$200 at the end of ten years, because during the earlier period the interest on each dollar monthly

payment being compounded annually is very much less in the earlier days than it is if the shares are five or six years old, when there is a larger amount to the credit of the shares to draw interest; consequently the shares at the end of half the time are only worth about 45 per cent, 40 per cent, less than that as a matter of fact, about 38 per cent.

Q. You are getting into depths where I don't care to wade. What I want to get at, Mr. Fields, is that the definite-contract plan, when properly worked, gives the borrower equal justice with the association? A. Yes, sir.

Q. The only thing that he has to pay is the premium and the entrance fee? A. That is the only thing he has to pay.

Q. In order to borrow \$1,000, what entrance fee does he have to pay? A. According to the number of shares.

Q. Well, \$1,000? A. That depends according to rules of the associations as to whether he is carrying one share or ten shares.

Q. Well, he is required under the laws to have at least one share. Suppose that he has ten shares? How much does he pay? A. One dollar per share.

Q. That is, \$10 membership fee? A. Yes, sir.

Q. What else is imposed upon him during the ten years? A. Nothing more than the interest and the regular monthly payments, including of course interest and principal.

Q. Yes; but that is what we have been figuring on here. Now, in addition to that monthly payment that will bring about the result you have just figured out, is there any assessment, premium, expense fund, etc.? A. That depends on the association.

Q. What is he charged with? A. Well, certain associations make a low-rate stock: that is to say, instead of 50 or 60 cents payment it may be 5 cents per share, so that on \$1,000 it would be \$50 for ten years or one hundred and twenty months. Now that, with interest at 6 per cent, would become withdrawable at the end of maturity.

Q. Well then, at the end of ten years that would be fully paid up? A. Yes, if every payment has been made.

Q. Well, what condition does he find himself in with reference to that stock at that time? A. It is subject to withdrawal.

Q. Does he get it? A. Yes, sir.

Q. Are you sure of that? A. I know it, so far as the "locals" are concerned.

Q. Fully paid up? A. Fully paid up at 50 cents per share per month.

Q. Then it is impossible for the borrower to do business unless he takes shares of stock, liable to fines, assessments, etc.? A. Well, he must take some stock in order to comply with the law.

Q. Well, I understand that. Now suppose he falls down in one monthly premium but takes it up next month, what difference is made in the payment? A. As a rule their notes provide that any payments that run delinquent are charged at the rate of one per cent per month instead of a fine.

Q. So that if he misses a payment and makes it up he is fined nothing more than that? A. No, sir.

Q. What about the stock? A. Ordinarily he must make the payments on his stock right along.

Q. I am still trying to find out where all these objections come from in borrowing from building and loan associations. A. Well, in this way: As a rule it arises out of this expense fund stock, that has been spoken of by Senator Hahn, and brought out by the Continental as class "A" stock, which, as was shown before, is very little used now. Now, the agents, as a rule, will say, "You pay your 60 cents a month on each share and you can draw out at any time." Now, they don't mention to the prospective client the expense fund, which means the difference between 60 and 10 cents deduction. Now that deduction they have forgotten all about at the time of their first going in; they have forgotten all about the membership fee, and when they come to have it figured out at the end of two, three, four, or five years and find that there is this deduction on each share, they begin to kick and think that they have been swindled. But they are wrong; everything has been conducted strictly in accordance with the terms of the by-laws.

Q. Well, I want to read you part of a letter I received, just to show you the way they write to me. I am not going to mention any names at all, for obvious reasons. The writer says, in part:

You will discover a palpable fraud if you order certain associations to produce their books. On a loan of \$1,000 in the pass book I am given credit for only \$20 on the principal sum, with all necessary payments paid up. I am swindled out of \$11 for every \$120 paid.

Now what do you think of that for a statement? A. It absolutely has no foundation in fact.

Q. Have you been in the habit of receiving such complaints? A. Yes, sir.

Q. Then it results from a lack of understanding of the situation? A. Yes, it does from not understanding the actual contract.

Q. Now take this \$1,000 for fourteen years. How much would he pay each month, figured here, evidently, on a 10 per cent basis?

A. Now, I really could not tell you that without knowing —

Q. (Interrupting.) Well, 10 per cent would make \$120 each month, flat rate. A. Well, yes; after that the interest would be \$83.

Q. Then it would not be \$120, as he states? A. Well, I can not tell you about this unless I know the class of stock he bought, the association from which he got it, the time for which the loan was originally made, and everything connected with it, because if you make a loan for fourteen years, the percentage that is calculated and credited up to the principal in the earlier days of the loan is very much smaller than it would be if allowed to run for a much longer time.

Q. Now he puts it this way: In fourteen years, paying \$110 per month, he has paid \$10,160, and the interest they have — A. (Interrupting.) That one hundred and twenty monthly payments of \$120 monthly would look like a loan made from the Continental Building and Loan Society, the Renters' or the Phoenix of \$10,000 on the 168 months plan.

Q. Now, if that is so, \$10,000 on the 168 months basis, how much will he pay? A. \$128 per month.

Q. It would be \$20,160, interest and \$10,000 principal at the end of fourteen years? A. Well, I have not figured that out.

Q. It is very easy to do it? A. Yes.

Q. Well, what then, in addition to that \$120, will he be required to pay? A. Nothing but the dues there might be on the stock.

Q. He would not have to pay any other interest but that? A. No, none.

Q. Now, how much would be the earnings during that time on the amount of money paid in, if the loan was at 7 per cent? A. Well, now, what do you mean in that way?

Q. Why, how much would the money earn in the association? In other words, if he paid in that amount and it was loaned out at 7 per cent and kept loaned out for the full time of one dollar a month for each dollar paid in, running for fourteen years, on a 7 per cent basis, compounded annually, would amount to \$280.87. A. Well, that would be one hundred and twenty times—

Q. (Interrupting.) Would it not be more than that? This man figures it out this way: If he borrowed from this building and loan company \$10,000, that is all the money it had as a particular capital loaned for one hundred and sixty-eight months at \$120, it would have received back \$20,100. Now, this interest would earn \$9,878, or in fourteen years all the money loaned to the borrower is paid back and he has to his credit \$20,038—

MR. WADE (interrupting): I wanted to say that the figures you make for the earnings for one hundred and sixty-eight months at \$120 are correct. I was figuring it out while you were talking.

MR. CURTIN: Q. So that at the end of the fourteen years that this man had the loan of \$10,000 the company had got back in earned money the sum of \$30,030. Or, in other words, out of that loan to him it has made \$20,038 in that fourteen years? A. Yes; but it was not all paid in.

Q. I understand that, and that it was the earning power; but what I want to get at is that building and loan associations are not in business for the good of their health. A. Yes; but every borrower who goes in is a component part of the organization and should profit accordingly.

THE CHAIRMAN: Q. As far as my knowledge goes, Mr. Fields, is it not a matter of fact that the so-called "local" associations give all their stockholders, as a matter of fact, a participation in the profits? A. Yes, sir.

MR. CURTIN: Q. And as regards the so-called "nationals," is it true that the stockholders, not perhaps the original subscribers, do they share in the profits also? A. Well, they all share in the profits of the company in proportion to the interest that they might have in them. If they have paid-up stock they share practically in the profits according to the terms of the contract, and the installment shareholders would thus participate in the balance of the profits that might accrue, but at a considerably higher rate.

Q. Then it all depends on the class of stock that a man holds? A. Yes; and a certain amount of the earnings would be credited to his stock and a certain amount charged, which, if he held stock of a par value, that would mean a considerable amount, but if he held simply one share of stock, that would mean but little.

THE CHAIRMAN: Q. I want to ask you a few questions, Mr. Fields, and I would like you, if you can, to divest yourself of any connection you might have with the Building and Loan Commission or any of its associations with which you do business. I think the other evening you said that some of these associations were loaning from their capital stock? A. Yes, sir.

Q. I presume fully paid up — A. (Interrupting.) Well, in a few of the associations not doing business or incorporated under the building and loan laws that capital stock is not fully paid up.

Q. I think that I understood you to say that but a very small proportion of them are thus constituted? A. Yes, sir.

Q. As Secretary of the Commission do you think it would protect the investor if there was provided a law enacting that this stock be fully paid up the same as bank capital stock? A. Of course building and loan associations all over the United States do not contemplate any other capital stock than what is the shareholders' ordinary or installment shares. Fully paid shares is a matter of later origin, and such stock is not capital stock in the nature of guaranteed stock of savings banks or anything of that sort.

Q. Now, Mr. Fields, perhaps I have a wrong impression about these so-called "nationals." I thought that they were not mutual, but for the benefit of a few stockholders only? A. Well, I don't understand it that way. While a few people may have the management and be able to draw the salaries, the principles of the associations intend them to be mutual.

Q. You made a statement this evening to Senator Hahn that you considered that the building and loan associations of California were all being conducted on a safe plan? A. I consider that so at the present time.

Q. Locals and all? A. Yes, sir.

Q. You mean that they are being conducted on safe business principles? A. Yes, sir.

Q. From your own investigations? A. Yes, as contemplated by the existing laws.

Q. Now, Mr. Fields, from your experience in building and loan associations, have any abuses whatever crept into them? A. Well, that depends altogether what you would class as abuses.

Q. Well, I leave it to your judgment as Secretary of the Building and Loan Commission. Could you recommend any legislation to protect the borrower and stockholder, judging from past experience that you have? A. Well, I suggested one idea with reference to loaning money of the associations to directors or officials; that has already been commented upon —

MR. CURTIN (interrupting): And not favorably, I suppose, from both sides.

THE CHAIRMAN: I recognize, Mr. Fields, that this puts you in a delicate position —

MR. CURTIN (interrupting): As I said earlier in this evening's session, Mr. Fields, in my estimation, does not occupy any delicate position at all to-day. He is an officer of the State of California, and it is in this capacity and as an expert that he is before this committee, in order to give it the benefit of his experience with a view to improving the conditions surrounding the existing building and loan laws of the State.

MR. FIELDS: A. Well, I will say that I believe there are two features, aside from those that I have already spoken of, that it would be advisable to put into the laws, and they are both features which I find in the laws of Illinois: and they are these: First, that the president and

secretary of every building and loan association should be under bonds, and the State laws should provide for that and require these bonds to be annually deposited with the Building and Loan Commission—

THE CHAIRMAN (interrupting): Q. Is there a treasurer of these concerns? A. That the directors should be required by law to keep or designate some bank as treasurer, and that all payments should be made by check drawn on such bank. You will find both of these points covered in the laws of the State of Illinois.

MR. HAHN: Q. Is there any association in the State to-day that does not pay all its bills by check? A. Most of them, of course, do pay in that way, but there is no requirement of law in the matter, and they simply do it because it is usually the most convenient way of making payments.

Q. Well, as a matter of fact, are any of them doing business contrary to that principle? A. I don't know of any. Of course some of the larger ones in San Francisco keep a certain amount of cash in the office all the time to meet their payments, but no large amount, and with that exception all pay their accounts by check. Now, there is one other feature that I would like to speak about, and in speaking of this now I speak with direct reference to the Waste bill, and I want to say right here—I believe that the same bill is introduced in the Senate by Senator Simpson—I want to say right here and now, that going back as far as last October I realized the difficulties that have been met with in the legislation that has been attempted in the last two or three sessions. I consulted with the president and secretary of the Local League, and told them that I was going to try and get the representatives of the National Association to meet with them and perfect a bill on which all of them could agree. Mr. Corbin of the Continental, Mr. Mallett of the Renters', and Messrs. Bush and Pardy of the Pacific States all agreed to the proposition; Mr. Grange agreed to a certain extent. They all came together with the exception of Mr. Grange, and prepared the Waste bill as it is at present. It was shown to me as it was prepared. I had nothing to do with the preparing of it, but after the committee was appointed I considered it, and, speaking generally, aside from what I have mentioned before, there is only one thing that I would like to see added to that bill, and that is this, to Section 647. It is an amendment in these words:

Except in the manner provided in this title, nor corporation, person, firm or association, not now actually and lawfully transacting business in this State, shall hereafter conduct and carry on the business of accumulating the savings of its shareholders, members or investors, and loaning such accumulations to them in the manner of building and loan associations.

The basis of that I got from the laws of the State of Maine. Now, the object of that is this: If that amendment is put into Section 647 of the bill and strictly enforced, from that time on there can be none of these organizations formed under any other law. They must be formed absolutely under this law. But eliminating the question of a few formed here outside under the general law, there are a whole lot of what is known as coöperative home associations. They are doing a business that is practically identical with that of the building and loan associations—if you will go back and take the associations of twenty years ago, where every shareholder was expected to be a borrower, or rather the outgrowth of the building and loan associations

of England. They are an expense fund proposition and a membership-fee proposition beyond anything of the "national" class. They came into this State three years ago, first from Kansas City three years ago last fall, and for over three months we had the worst kind of trouble in the world trying to drive these foreign associations out. We finally succeeded in driving them all out of the State, or made them comply with the law by incorporating under the laws of the State. There is one here now, doing business in San Francisco, which absolutely defies us; and as the law now stands it is an absolute impossibility for us to reach it and effectually deal with it as ought to be done.

THE CHAIRMAN: Q. Where is that one? A. From Colorado.

Q. Where did you say it was located here? A. In San Francisco. It has practically defied us. Under the present laws we can not help it; we can do nothing against it.

MR. HAHN: Q. What is the name of that association? A. The I can not speak it now; I have not thought of it for some two or three months.

Q. How many could you name in the State? A. I caught on to another one like this, that came from Paducah, Kentucky, that was doing a similar business in Los Angeles.

THE CHAIRMAN: Q. I have been informed, Mr. Fields, that one of these companies in Los Angeles, incorporated under the laws of Arizona, was doing a similar kind of business as you state, and that you tried to bring it to terms to comply with the laws of California, and it practically told you to go to Hades. Is that so, or not? A. Well, there is one that is doing business, imported from Arizona, that we have never been able to catch doing business in California, that is selling stock and making loans, and of course under those circumstances we could do nothing. Why, this one issued a circular that came into my hands and which I read to Commissioner Field, and he said, "That is a plain building and loan association," and he notified the party to cease doing business until he complied with the laws of the State. We received a reply from him that was absolutely saucy. When I was here last week I found out from the Secretary of State's office that he had complied with the requirements of the Secretary of State's office, and beyond that he says he will do business irrespective of what we say. We have informed him that our office is the judge of this, and that he must tie up to the views of said office or quit business altogether. I don't know what the result will be, I am sure, but I want to fix the law in such a way as to absolutely be able to handle people of this sort, and that amendment to the present Commissioner bill absolutely handles this without any trouble at all.

MR. CURTIN: Q. I want to call your attention, Mr. Fields, to the Pacific Coast Savings Society. Have you ever had occasion to examine into the terms of the contract in which they loan \$1,000 for seven years? A. Yes, sir.

Q. Now— A. (Interrupting.) Well, in the specific contract the only thing I know is that they have this series of tables that they have acquired for about four and a half years, and have made very many loans on them.

Q. Now, let me read you a letter, and I want to ask you if you have ever examined their books to see if they do this kind of business?

MR. HAIN: Q. There has been quite an evolution in the building and loan business during the past ten years, has there not, Mr. Fields? A. Yes; a very great deal, indeed. Many of the private parties loaning money have adopted similar rules which have resulted in lower rates of interest in the larger cases.

MR. CURTIN: Q. This is what I want to ask you. Here is what this man says:

I borrowed a thousand dollars for seven years, for which I gave a note and deed of trust for a house and lot, each having a live limit of seven years. The interest is \$17 per month. After paying right along for four years regularly I found that the total earnings accrued were only \$115, and that in that time I had only reduced the debt from \$1,000 to \$885.

A. In how long a time?

Q. Four years. Is that in accordance with any definite-contract plan? A. I can not tell without knowing how the loan was made. Now, let us see. He says seven years and his payments were—

Q. (Interrupting.) He says his payments were: \$10 interest, \$6 membership fee, and \$1 premium: making a total of \$17 as monthly payments. A. Well, that could not be in accordance with the definite-contract plan figures.

Q. Well, during your occupancy of the position as Secretary of the Commission, have you ever looked into these loans and examined the securities? A. Yes, sir.

Q. Well, have you ever examined the terms? A. Oh, we can not stop to figure over each one of these loans to see if it is figured out right or not.

Q. Then you don't know if that company was dealing with its borrowers rightly or not? A. Only in a general way, we don't—

Q. (Interrupting.) Then you don't look to see if any one is getting a loan on the definite-contract plan or not? A. We take the terms of the mortgage.

Q. Have you ever done so to see if this condition exists? A. Of course, all these loans have a particular form of note, and that speaks for itself.

Q. But have you ever looked to see if such a condition exists? A. No, I have not.

Q. Now, do you mean that we shall understand that under the law as it exists here now that a man, after paying his payments regularly for four years, will find that he has only paid back \$115 principal on the original \$1,000? A. Well, if these cases had been reported to us and come up before us we would investigate them and see if they were correct or not.

Q. But why? A. We can not go into the figures and details of every one of these loans to see how they are credited up.

Q. Now when, Mr. Fields, did you ever look into the Pacific Coast Savings Society for the first time to determine its solvency? A. The association has been examined every year.

Q. Well, the last time was— A. (Interrupting.) The last regular examination was made last May.

Q. Did you report as late as last November that it was perfectly solvent? A. The only report made was the result of the examination in last May or thereabouts. Then we considered the association perfectly solvent.

Q. Well, as late as that, was there no complaint made to the Building and Loan Commissioners that — A. (Interrupting.) I never heard of it.

Q. Have you letter-press copies of your replies to any such complaints as might have been made? A. Yes, sir.

Q. Then if you did receive any complaints since your last examination as to the solvency of this institution, the dates on these would show it, would they not? A. Yes, sir; I suppose so.

Q. Well, how is it, then, when you get information in November that a society is insolvent, although you examined it in May and found it to be thoroughly solvent? A. Why, then, of course immediate action would be taken.

Q. Right off? A. Of course; but because some shareholder does not understand how to work out his contract or falls down, it does not necessarily constitute this information.

Q. Well, when you get the information, what do you — A. (Interrupting.) The matter of that was explained in this way: That under the law, parties applying for withdrawals, if there was no money on hand to meet these withdrawals, were obliged to have their notices registered, and be paid in such order. Now, information reached the office, of course, that they were not making payments. Explanations were asked for, and the answer was given that because of the vast amount of loans made by Easton during the year, they had to pay off overdrafts and such things before paying off withdrawals, and that that had to be attended to first. That would not necessarily make them insolvent, but would embarrass them only for the time being.

Q. What do you understand by insolvency in building and loan associations? A. It is according to the interpretation of the United States District Court at Chicago, Judge Grosseup, there being no California law on it.

Q. Well, there is a law that defines when a corporation may be put into insolvency. A. A general corporation, yes; but the United States Court decision as given by Judge Grosseup with reference to building and loan associations practically says, in a commercial sense, that there is no such thing as insolvency in the indebtedness as to shareholders. Judge Grosseup says that insolvency is that condition existing where the assets of the association duly assembled will not meet the dues paid in by the shareholders.

Q. But I ask you if you believe that, under the laws of California to-day, an institution that can not pay its withdrawals, with no money on hand, that a shareholder has to wait for a year to get his money or even more — A. (Interrupting.) I don't believe that any building and loan association in the United States would be declared insolvent on that account.

Q. Well, what kind of business methods are they pursuing if they get into such a condition? A. It was an "astonisher" all round.

Q. Well, that condition had been going on for a long time, and could you not have discovered that a long time ago? A. Well, as partially explained before you came in this evening, the examination developed the fact that a large percentage of those which had all the appearance of being perfectly legitimate were in reality loans made to dummies.

Q. Well, but the same facts that developed afterwards could have been perfectly well brought out previously, could they not? A. Yes; if the same class of examination had been made.

Q. Did it not occur to you a long time ago? A. No, sir.

Q. Now, this company had an office at one time in the "Call Annex" Building in San Francisco, did it not; and were they not obliged to give it up on account of not being able to pay rent? A. I never heard of that. It is still there.

Q. Not now. A. Well, it was there last week.

Q. Well, the office is there, but where is the company doing business? A. There, so far as I know.

Q. Well, I have a letter from the managing director, and it comes from another place. A. Oh, well, he has another office where he does his business.

Q. In other words, this concern is absolutely insolvent. You said the books were in the Attorney-General's hands? A. No, sir.

Q. Well, where are the books? A. In the office of the Commission.

Q. Well, what are the books doing there, if the company is in insolvency? A. They are enjoined from doing business by the courts and are in the hands of the courts.

Q. Now, do you know anything about the Capital Building and Loan Association? A. Yes; it went out of business six months ago.

Q. How long were they practically insolvent? I mean before they went out of business? A. I can't exactly remember.

Q. Well, four, five, or six months? A. Possibly that time.

Q. Shall we say a year? A. Hardly as long as that.

Q. Did any information come to you more than eight months prior to that time? A. No, I never heard of any.

Q. And did you recommend that no action be taken at the time and that everything would come out all right? A. I have no recollection of that.

Q. Do you know William Klinger? A. No; I know of him.

Q. Do you remember ever having any conversation with him? A. No; I don't recollect any conversation had with him at all.

Q. None at all? A. No; none at all. I know that Davis came to me and told me the situation, and said that they were going to wind up and that therefore there was no necessity to go any further in the thing, as in several instances these smaller associations have gotten into trouble and they have been allowed to wind up themselves without interfering, because under the decision of the Supreme Court in the Union case, unless prejudice is charged or shown the courts can not appoint a receiver in building and loan associations, and those that have been wound up by a receiver it has been a very disastrous experience, and those that have been wound up without forcing the directors into the hands of the courts have been much more satisfactory than otherwise.

Q. Do you know anything about the Excelsior Building and Loan Association of Los Angeles? A. It is in process of winding up in accordance with the resolution of the shareholders.

Q. Did you ever hear the way that they do business? A. Why?

Q. Well, let me give you an instance where a man paid in 1899 for a contract. In fourteen years and six months he had paid into the society \$4,350. In fifteen years and eight months, I believe—yes, eight

months—he was entitled to draw out only \$3,200, so that he was out about \$1,200 on the transaction. Now, was that their method of carrying on business? A. No, it was not.

Q. Well, here is a man that makes a positive statement that these are the exact facts. Were you aware of any such condition? A. I certainly was not.

Q. Did you ever hear of any complaint? A. Well, yes, I did. Only by hearsay. That association had a large amount of real estate, and the question was raised with reference to their solvency. A special committee of their own shareholders was appointed to take a real-estate man and have their real estate appraised, and the report of this committee showed a surplus of nearly \$3,000, mostly on the real estate.

Q. What happened then? A. Well, a few months after this they voted to go into voluntary liquidation, and are so now and have been for several months.

MR. CURTIN: That is all.

THE CHAIRMAN: Is there any other question any of the members of the committee would like to ask the witness? Very well, then, Mr. Fields, you are excused.

THE WITNESS: Will the committee need me again?

MR. CURTIN: Well, we can't tell at the moment. Will you be down here to-morrow?

THE WITNESS: Yes, I have to appear before another committee here to-morrow, and will attend the meeting of this committee to-morrow night.

THE CHAIRMAN: Well, if we need you again after that we can telegraph or telephone for you at San Francisco, can we not?

THE WITNESS: Yes, sir. Well, how shall I do about presenting my bill for expenses?

MR. CURTIN: Well, if you will present it to the Chairman it will be put through with all other claims of the committee as a resolution at the proper time. Of course, if it is a pressing matter, you can give your claim to the committee right away and a special resolution can be passed in the morning in reference to it.

THE WITNESS: Oh, no; there is no special hurry.

THE CHAIRMAN: All right, then, Mr. Fields; you are excused for the present.

MR. CURTIN: Mr. Chairman, who is the sergeant-at-arms appointed for this committee?

THE CHAIRMAN: John Tyrrell; but I don't see him here to-night. I will see that he is in attendance in future, however.

MR. CURTIN: Yes, he ought to be. Well, I would like to have a subpoena issued for Mr. Henry Klinger to come and give evidence before this committee.

THE CHAIRMAN: Is he in Sacramento at present?

MR. CURTIN: Yes; I was speaking with him last evening.

THE CHAIRMAN: Well, will it be necessary to subpoena him? Won't he come and go on the stand voluntarily?

MR. CURTIN: Yes, I expect he will; but I want him to know of our next meeting so that he will be here.

THE CHAIRMAN: All right. Mr. Grange is here to-night to testify for the committee. Shall I call him now?

MR. ANDERSON: Well, it is getting very late, and I have a deputation from down below that want to see me and——

THE CHAIRMAN: Senator Hahn is under the impression that we had better go ahead to-night with the business of examining Mr. Grange so as to get ahead as quickly as possible.

MR. HAHN: Yes, I think that will be best. The time is growing very short now for this investigation, and if we do not have long sessions we shall probably be unable to arrive at any conclusion to do anything.

MR. ANDERSON: Very well, if the committee will excuse me for ten minutes while I go and attend to these people, I will be glad to continue.

THE CHAIRMAN: All right, Senator. Mr. Grange, you will please be sworn.

TESTIMONY OF CLARENCE GRANGE.

Sworn.

MR. GRANGE: Mr. Chairman, I was going to suggest that perhaps it might facilitate the examination if I was permitted to start in on a statement of methods, and recommendations as to legislation, having the committee interrupt me from time to time, asking questions, and I might perhaps be able to bring out thus what perhaps might not be brought out by cross-examination.

MR. HAHN: Yes; but I would suggest, however, Mr. Chairman, that first we ask Mr. Grange a few questions about the methods of building and loan associations of the class to which he belongs, and then he might make a statement.

THE CHAIRMAN: If the committee so pleases it is so ordered.

MR. HAHN: Q. Mr. Grange, you are connected with the Phoenix Building and Loan Association, are you not? A. I am the Secretary and Managing Director.

Q. Where are your headquarters? A. In San Francisco.

Q. When was this association first organized? A. The original organization was in 1889 as a Public Savings Building and Loan Association, and five years ago myself and associates acquired the charter, and changed the name to the Phoenix Savings Building and Loan Association, at which time the business of the Phoenix was organized.

Q. What was the amount of the capital stock when you organized with your associates? A. We originally subscribed, as near as I can recollect, to about \$35,000 or \$40,000.

Q. No, I mean your total capital stock? A. The total capital stock is 250,000 shares.

Q. Well, how much is it in dollars and cents? A. \$25,000,000, which is the limit under the charter.

Q. And that still remains the amount of your capital stock? A. Yes, sir.

Q. How much of that stock is now subscribed? A. Between seventy and eighty shares.

Q. Representing how much money?

MR. ANDERSON (interrupting): Is it the intention of this committee to get the record of the financial standing of these corporations? If not, I believe it unwise to take up any one of these corporations and set up its findings for the public—

MR. HAHN (interrupting): I merely made that as a preliminary question to my examination. I had no thought of boosting any particular corporation whatsoever; in fact, I am connected with two corporations of this kind in the south, and it certainly would not be policy for me to try to boost Mr. Grange's association or any other in another part of the State. I merely wanted to get this preliminary information from Mr. Grange as to the methods of his class of corporations. Anybody can obtain this information from the prospectuses of the company, but I preferred to get it first hand from Mr. Grange.

MR. ANDERSON: It is my judgment that Mr. Grange be not asked these questions, unless officers of all the different building and loan associations be asked in the same way; because it will go out to the world that Mr. Grange has been examined before us, and we have found so and so, and it would not be fair to the other companies. Now, if this committee has any reason to believe that the company of which Mr. Grange is an officer is not doing business honestly, and we want to investigate that company, then these questions might be pertinent; but I don't want to put my approval on any company, nor give it my disapproval, unless we are going into other companies the same way, without some reason for picking out this special company.

MR. HAHN: We can very easily ascertain if the methods are proper, by the way the business is being done. Now, you asked a question of Mr. Fields, I believe, as to whether it would be possible to fix the expense rate to be charged against each share of the stock. Now, I think you will agree with me that if an association is doing an enormous amount of business, it ought to do it at a less rate than the association that only does a small amount of business, and these facts can only be ascertained by inquiring into the business of a corporation. If they are doing but little business, that is one thing, if the methods they are pursuing are according to the law under which they are incorporated. Now, unless they are doing a big and successful business, it is far more probable that we want to suggest a new method instead of the one they are pursuing. Now, that is my object in these questions. It is not to boost this or any other particular company, as I have stated before.

MR. CURTIN: In other words, you propose to put Mr. Grange on the stand for the information he can give you from his experience in the building and loan business; personally, I would rather hear half a dozen complainants first than all the officers of every building and loan association in the State. I want to get both sides of the question.

THE CHAIRMAN: Is it your thought to examine Mr. Grange on the same lines as Mr. Fields?

MR. HAHN: No, I would not; he is biased. His opinion, as far as I am concerned, ought not to influence me where the State Mutual of Los Angeles is concerned, as to whether it is doing a proper business or not.

THE CHAIRMAN: Then, how were you proposing to try to arrive at the methods?

MR. HAHN: Not only in this one association. I want to find out what the methods are of all, and whether they are within the laws of this State, and whether they are pursuing methods that are expedient.

MR. CURTIN: My position is this: While I am willing to hear of methods from Mr. Grange, I would much rather hear from a lot of fault-finders than from a man who is on the other side.

MR. HAHN: Well, I understand that it is through the columns of the

newspapers that there has been something said against the methods of the Phoenix Association, and I would like to say that I would like to try and find out the correctness or not of this first hand. If I am working in the dark, like you are, that is a pretty hard proposition.

MR. CURTIN: I am working in the dark for this reason: I would rather hear from all the complainants whose letters I have with me to-night, and not from the officers of the associations, whose methods of business must be eminently satisfactory to the associations themselves, but might be entirely unsatisfactory to the investors.

THE CHAIRMAN: I want to say this to Senator Curtin: He said that there was not a building and loan association——

MR. CURTIN (interrupting): I said that there is not a building and loan association in the State that is prepared to admit that the terms of its contract are not eminently satisfactory according to law. But how about the other fellow? He is the only fellow I am interested in. Complaints do not come from the building and loan associations. They are not up here clamoring for a relaxation from some law. It is the other fellow I want to hear from. For my part, I do not care about hearing from Mr. Grange.

MR. ANDERSON: My idea is this, and it has so been from the start, and that is, that we would have officers from the various committees [? companies] that knew their business or thought their business was absolutely on a sound basis, but of whom the public had a different impression instilled into them by the newspapers, and expect to get an examination at the hands of this committee, and inasmuch as we found no fault with them they would go out with a clean bill of health. Now, if we put Mr. Grange on the stand without any particular object in view, and he goes out of here after that examination, and we do not report adversely upon him, the newspapers will all publish that that company is absolutely sound, for the reason that it was examined before this committee and no unfavorable report has been passed. I agree with Senator Curtin that information should not be obtained from members of individual companies, unless there was some particular object to be accomplished by such examination. Now, we have already received all the information that I believe this committee wants as to the enactment of new laws on building and loan associations. We have covered this to-night from the information received from our State officer, and I am satisfied that Mr. Grange is not going to testify that the methods of his company are wrong, and I am willing to stipulate that Mr. Grange will formulate a plan for new laws from their standpoint. But——

MR. HAHN (interrupting): But, Senators, you can listen from now until doomsday to men who find fault with some building and loan association, and afterwards you would find out that they didn't understand anything about the terms of their contract, anything about the rates of interest, nor anything about the system, and that probably the greater number of them would never be capable of developing a bump of intelligence sufficient for understanding them. Now, the building and loan plan is technically a banking business, and very few men understand it from one end to the other. It is a peculiar business. We all have a general smattering of it, of course, from the literature, advertisements, etc., but when it comes down to the practical working of the thing that is another question. Now, if you take the statement of the

individual for the whole proposition as to what he is expected to do, you may go quite wrong. Ofttimes the agent who solicits the business, through an oversight, perhaps, fails to make complete explanations of the contract; but disappointment comes because of their ignorance, and not because of any irregularity on the part of the officials of the company, and a great many things occur that cause disappointment. Now, you have an official here who runs a big building and loan association in this State, representing one of what is known as the "Big Four" of building and loan associations. Now, I would like to know their methods, and if they are pursuing good ones, all right; but if they are not, I would like to amend the law governing such institutions. But if we are not here for that purpose, let us call the thing off. For my part I do not want to sit here day after day and night after night listening to complaints, and if—

MR. CURTIN (interrupting): My position is this: I will admit that the methods of building and loan associations are peculiar. Now, why should they conduct their business in such a manner under the laws that no one can understand them? A man can borrow money at a bank at a certain rate of interest and hold it for years without complaining. But let him borrow the same amount from a building and loan association, within six months he is full of complaints. Now, if you get the contract from the individual who borrows the money, all the methods of the company must be there. I don't want to examine any man if you will give me his contract. But I want to see where the cause of complaint lies, and I would rather hear from the complainant than from any other person.

MR. HAHN: Then our business is over, so far as this work is concerned.

MR. CURTIN: I never came into this committee for the purpose of giving the Phoenix or any other company a clean bill of health on the information of their officials alone. What I want to determine is whether from the contract—

MR. ANDERSON (interrupting): Well, but what I would like to know is why we should select Mr. Grange to give us this information in an amicable manner, out of all the representatives of all these associations in this State. Now, until we decide in executive session or in some other way that Mr. Grange is more competent to give us this information upon which to examine the different meetings [? companies], I must certainly object to Mr. Grange testifying before this committee, and then going out and stating that his company is absolutely solvent because he has been examined.

MR. HAHN: Suppose some one should send to this committee, or ask to be allowed to state before it, a grievance against this company, you would send for him?

MR. CURTIN: Yes.

MR. HAHN: You would examine the person and he would make his statement of the case; but could you intelligently cross-examine him without knowing the methods of the association?

MR. ANDERSON: Like Senator Curtin, I would ascertain, if I wanted to know the methods, without asking these officers, but from the contract, etc.

THE CHAIRMAN: I offer this suggestion: Some few evenings ago Mr. Grange voluntarily made the statement that the building and loan laws of California are a farce. On Senator Curtin asking him what he

meant, he said, "I mean by that that they afford no protection either to the borrower or the investor." He also said that he would be glad, from his experience, to offer information to this committee that he believed would go to perfect the laws of the State of California in this respect. Now, if he is inclined to do that, and you ask him questions without making any reference to the Phoenix, would not that be good testimony? I would like to add that Mr. Grange has come here voluntarily and without having a subpoena issued by the committee. Now, would it not be well to hear from him without going into the condition of building and loan societies at all?

MR. ANDERSON: Well, I am perfectly willing that Mr. Grange or any other person whom we may decide upon may come before us to suggest how we may remedy any law, but as to going into particulars of his particular company, I don't think it good judgment at this time.

MR. HAHN: Then you would have to perform a miracle. But cross-examine him in any other way, you could not keep the "Phoenix" out of it very long.

THE CHAIRMAN: But if this committee would permit him to make a statement of the situation without asking any questions, that statement might be of benefit for the purpose of remedying the laws of California on that line. I ask you, are you willing to admit that?

MR. ANDERSON: I am not desirous of shutting him off there, but I don't want to know what his assets are, nor his resources, nor anything about his company, at least not at this time, and I think that this committee will get itself into trouble if it starts out in that way.

MR. HAHN: I am opposed to Mr. Grange making any statement, if the idea is to divorce him entirely from building and loan associations, because I think it is impossible. We are not going to give him any red letter of good behavior from any statement he may make. I expect that Mr. Wade is here for the purpose of giving us information from his standpoint, and I certainly want to get it. As a matter of fact, Senator Anderson, as I stated before, I am connected with two associations down south, and it would certainly not be policy for me to boost some other association in another part of the State, nor to my interest to do so. But this is now a matter for the people of the State of California to know of—

MR. ANDERSON (interrupting): But I don't want to know about the assets of this corporation.

MR. HAHN: Then I object to Mr. Grange testifying.

MR. ANDERSON: I am willing to have Mr. Grange excused from testifying.

MR. CURTIN: I am not ready to give a bill of good conduct to the Phoenix or any other building and loan association.

MR. HAHN: Then afterwards what information would you have?

THE CHAIRMAN: This: that the condition of things can be changed if we can change the laws.

MR. HAHN: How would you know that that is true?

THE CHAIRMAN: I would be willing to hear the statement of the man under oath.

MR. HAHN: Well, personally, I would like to have Mr. Corbin here and go right into the whole matter, and I would not care to give the Continental a clean sheet either, without that. But what we want to hear is anything that would benefit the people of this State with regard to building and loan societies.

THE CHAIRMAN: Well, Mr. Grange, you can go on, confining yourself to generalities.

MR. HAHN: Then we understand that he is to confine himself to generalities?

MR. CURTIN: I want to strike those words out and say that you are on the stand as an expert on building and loan methods.

MR. ANDERSON: I would ask to have stricken out from the notes—records—all the examination interrogatives and answers.

THE CHAIRMAN: You mean since Mr. Grange has been sworn to the present time?

MR. ANDERSON: Yes, Mr. Chairman.

THE CHAIRMAN: Do you make that as a motion?

MR. ANDERSON: I do, sir.

MR. CHAIRMAN: Do you second that motion, Senator Curtin?

MR. CURTIN: No, I would not like to second that motion. I don't think that the questions asked so far will do any harm.

THE CHAIRMAN: The motion is made, but not seconded. You will therefore proceed, Mr. Grange, and the testimony will remain in the records.

MR. GRANGE: As a question of knowledge of building and loan laws, I might state that I have had about fourteen years' experience in building and loan associations in both "locals" and "nationals"; I have been Building and Loan Commissioner of the State of Montana, and have drafted laws in the line of protection of the public. I stated the other day that the building and loan laws of the State of California are a farce, and I meant just what I said, so far as protection is concerned. I will take up the question of loans, that seems to interest Senator Curtin particularly. Under the present law, and in the Waste bill there is a provision that premiums are permitted, that the shareholder and borrower can be one and the same person; that is to say, in order to obtain a loan a man must be a shareholder in the corporation. My opinion is that for the protection of the borrower he should not be a shareholder in the corporation. He does not want the liability that falls upon the stockholder under the laws of the State of California. Second, that all of the objections that have arisen, the complaints that have been made, arise from the stock transaction. It is through this that the management of building and loan associations, either intentionally or unintentionally, by reason of the necessities of the business, succeeds in cinching the borrower.

MR. CURTIN: There you and Mr. Fields differ.

THE WITNESS: We do. I want to say further, that I think nearly all the building and loan men here differ with me in that idea, because I am for progression and the majority of them in this State are for the contrary. In the stock transaction the borrower becomes responsible for his share of the losses of the institution, for his share of the expenses of the institution which may be assessed to him in various ways: First, by the contract charged against his stock; second, by the crediting up to the shareholder of the loan, percentage of interest, and earnings, these to be based upon his loan—

MR. CURTIN (interrupting): Q. How is that accomplished? A. In this way. For facilitating the calculation we will say that the association charges 6 per cent interest and 6 per cent premium, or 12 per cent interest. The requirements of the borrower to carry the stock to the

amount of the installment thereon cuts no figure for the purpose of this argument. For by their reservations either by direct assessment, or under the net definite plan, instead of crediting to that borrower interest at the rate of 12 per cent per annum, they credit him at 6 per cent, 7 per cent, or 8 per cent, and in some associations as low as 3 per cent, or in some associations when he attempts to withdraw his loan, he simply gets credit for the amount paid on his stock.

Q. Now if a borrower makes such a contract, do you mean to say that he has no protection from any statement of the net earnings of the company? A. The net earnings of the associations may be reduced by expenses or by losses in such a manner that the borrower, instead of participating in the full earnings of his loan, simply participates in the net earnings of his association, which in some cases amounts to only 3 per cent.

Q. Now, does that not result in the same thing? A. Absolutely, and that is where Mr. Fields and I differ. In my opinion there is but one way to try to overcome that, and that is to make the contract for the loan to read in a definite manner with a definite rate per cent of interest upon monthly balances, and make the note to read without a definite payment in dollars and cents, so that the borrower can figure it out at any time, so that any one who understands the simplest principles of mathematics can figure the exact condition of that loan for himself. I contend further that the borrower after one year should have the right to the repayment of that loan on the actual balance that may be due, deducting only from his payment the loss of that interest accrued, together with the accrued expenses, and due consideration must be taken always for a reasonable time for the use of idle money, and also for the event of a borrower coming in at a period when——

Q. (Interrupting.) Now, does not the last suggestion create the very discrepancy in the contract that we want to overcome? A. Yes, it does, and for two reasons: Firstly, the association, by reason of his repayment of his loan, has additional money idle and not earning. Secondly, it is customary in all banking business that some consideration should be given to the investor, especially where a loan is made. Now, I would overcome any question of uncertainty by fixing a reasonable number of months' interest that may be charged beyond the accrued interest of the loan. For instance, where the tax rate is 1.65 per annum, perhaps three months' interest would be sufficient. For a loan located in Marysville, where the tax rate is 4 or 5 per cent, naturally the association would have to receive a little more consideration.

Q. But by eliminating from the present law of building and loan associations that the borrower become a shareholder, do you not take away from the building and loan business its very basis? A. No, sir.

Q. But wherein does the difference lie between its dealings in that way and those of a bank? A. Because a bank has depositors only, and a building and loan association has stockholders only, and is a mutual institution as regards the borrowers, but only as regards the investors.

Q. Do you mean by limiting them that no one on the outside could borrow from it? A. Yes, sir.

Q. Now, is not a bank in that same position? A. No, sir.

Q. Take the Hibernia Bank. A. That is an exception, and it is a wonderful institution.

Q. Now, do you not think that the law would be still better for all

concerned if the definite-contract plan would eliminate any right to charge current expenses, which would be left for the company to make? A. But that would be unconstitutional.

Q. That is in my mind. A. There would be a discrimination of stockholders that would be impossible. And that being the case, the only solution is to compel building and loan associations to make loans. There are laws on our statute books permitting them to make loans on one share; they are practically doing that; but I say the Waste bill is reactionary, because it provides that a member must be a shareholder and have an amount of stock equal to the amount of his loan.

Q. Then you do contend that building and loan associations can preserve their identity and yet strike from them that mandatory provision of requiring the borrower to be a stockholder? A. Absolutely; yes, sir.

Q. Then unless you put this amount as expenses for withdrawal it will not be incorporated in the contract? A. Yes, sir.

Q. Now, if the law was so amended as to provide for the possibility of borrowing money without becoming a shareholder, and the taxes always being exactly and mathematically calculated, you believe that in that way we would get rid of many of the complaints? A. All of them.

Q. You use that word "all" advisedly? A. Yes, sir.

Q. I agree with you. A. This nearly all results through the manipulating, by the company, of the figures throughout the life of the contract, and through a lack of understanding on the part of the investor or borrower in figuring the thing out.

Q. Can any ordinary person expect or be presumed to know the methods or manipulations as used by building and loan associations? A. No, sir.

Q. He has to depend upon the agent? A. I think so, and therefore I say that the contract of the loan should stipulate the exact amount of money that must be paid as a withdrawal fee so that the man who runs may read.

Q. Now, Mr. Grange, having considerable experience, you have undoubtedly formed an opinion as to the constitutionality of the forming of these contracts? A. It would not be constitutional if you attempt to single out building and loan associations and regulate the rate of interest they should charge.

Q. But the conditions of the contract? A. Yes; I think so, because you simply require from the association that it do its business open and above board, and in such a manner that the man who runs may read.

Q. Well, the question is, then, if we have the power without a constitutional amendment to place the limitations of withdrawal fee, do we not come within the limit of the local laws without the consideration? A. I am not suggesting that any discrimination be made against building and loan associations as against other corporations; but I simply want to take away from them the power to charge a premium, to compel the borrower—computation will do the rest—to take stock, and to require the association to be specific in its contract in the rate of interest and percentage—

Q. (Interrupting.) The Supreme Court has held that you can not select a particular subject for particular classification that does not apply to any other subject. Now, will not that decision apply to legislation providing that building and loan associations shall so exact?

A. It might in that point, and thus exact more than the maximum amount of penalty for the sale of its loans, or require nothing other than the definite-contract plan. It might, because I think the same question was practically before the Supreme Court of this State in the case of a Los Angeles institution incorporated under the laws of 1891, in which the association made such charges on their shareholders. And the Supreme Court held that the association was within the exercise of its powers. So, as to the limitation, perhaps it would be unconstitutional.

Q. Well, that is what I am coming to. Then this Legislature can not enact this law. Now, if a constitutional amendment were submitted and carried, providing that the Legislature may pass laws for the regulation of all corporations in California——

A. (Interrupting.) It would be a very good idea.

Q. Then it would cover all corporations, prescribing terms and limitations. Now, a corporation that is created, is a creature of the law—it never goes above it, it is true, but when once formed is a distinctive being; and is it not a fact that the law can not come in and single out any particular corporation for limitation. Now, do you believe it in the power of the Legislature to remedy this? A. I doubt very much as to whether such a thing could be remedied by legislation, in so far as refers to the charge.

Q. And also the terms? A. I think it would be within the power of the Legislature to say that building and loan associations must make a contract that was intelligible, and that the note should provide the rate of interest to be paid. Thus, you either forbid or provide that the associations require the borrower to assign stock as the basis of his loan or permit them to make loans without stock—computation will settle the balance—as in the savings banks, because there will be a number of associations in the State of California that for the purpose of obtaining an outlet for their money in competition with savings banks will adopt the straight-loan plan, and their action will drive all the other associations to follow their example or go out of business.

Q. And you believe that all the trouble arises from this plan of contract of stock and premium? A. Yes, sir.

Q. And you think they can preserve their identity by eliminating these features, and do a good business by so doing? A. Yes, sir.

Q. Go on. A. The next point that I would require of the building and loan associations would be that the applications for their stock, certificates of stock, showed all numbers thereon, always be plain; that is to say, they should contain all of the information that it is necessary for the shareholder to know; compel the association to place on every contract the amount of dues or penalties, if any are charged, withdrawal fees, if any are charged, membership fees, etc. Let the contract be drawn up, in a word, so plain both as to the obligation signed by the prospective borrower, and the certificate furnished under that obligation, that any one can understand it when he gets it.

Q. But how are you to remedy this? Can this be done? A. If I am correct in my theory, under the powers of police regulations you can see that the application for stock and the certificate issued in accordance therewith shall contain a statement of the amount of dues to be paid, when paid, the amount of withdrawal fees, membership fees, fines or forfeits to which that certificate may be subject.

Q. Then to get to that state, the statute must be re-formed; otherwise you get the same trouble over again. A. Yes, sir.

Q. Because the building and loan associations will have the whole thing in their hands again? A. I think so.

Q. Do you think that by a constitutional amendment we can single out building and loan associations and make different rulings for them than for other corporations— A. (Interrupting.) That is too deep a constitutional question for me to answer; not being a constitutional lawyer, I can not answer it, but I think that you—

Q. (Interrupting.) I have always been advised that the trouble lies in the particular way in which it is worked. A. No, sir; it is the particular way in which it is *not* worked.

Q. You have the advantage of me there. A. It usually provides that this is to certify this fee, and the certificate is issued in accordance with the by-laws and charter, with nothing else put in as a rule; some, however, use a fuller contract, so that there can be no mistake.

Q. Then it goes back to my position—the peculiar working of it— A. (Interrupting.) No, sir; I refer to the application, whereas you do not.

Q. I think so. A. I do not; because the borrower being the one who desires to place his money in hands of the other party, it is he who seeks the contract.

Q. Then you agree, practically, that the contract is at the root of the trouble? A. That is about it.

Q. So that the remedy would have to come from strict legislative action? A. Yes, sir. Now, let us pass on to the question of other security to the shareholder. It is my contention that building and loan associations should be required, as they are required in many States of the Union, to deposit all of their securities, without regard to the character of same, with the State officer and with a trust company in trust for the members and shareholders of the institution, placing these securities beyond the control of any officer or set of officers of the corporation. Furthermore, to prevent the misuse of building and loan mortgages, I would suggest that every building and loan association should be required to indorse across the face of their obligations the word "non-negotiable." Furthermore, they should be expressly forbidden and have the power taken away from them of hypothecating any part of their stock.

Q. What follows, if denied such transaction? A. I consider it folly to permit building and loan associations to borrow money and pledge their securities for same, because when they do so they are obliged to do so in excess of the amount they borrow, rendering the association liable to be called upon for repayment of the loan in times of strain, giving the money-lender the right to foreclose on those securities, and depriving the shareholders of their guarantee.

Q. Just like the Pacific Coast Savings Company? A. Yes, sir.

Q. Then what you suggest would just keep them away from speculation? A. Yes, sir.

MR. HAHN: Q. In other words, the borrower does not have his notes fall into the hands of a third person? A. Yes, sir.

MR. CURTIN: Q. But what I want to get at, the particular fellow I want to get at, is the man who would speculate upon somebody else's money— A. (Interrupting.) And it would prevent in a large measure an officer or set of officers using the securities for his or their own benefit.

Q. Well, that is forbidden—— A. (Interrupting.) Suppose it is. If the securities are rendered non-negotiable by having that stated on their face, no money-lender will take them as a security.

Q. But should the penalty be a civil one? A. No, sir; I don't think so. I think it should be a felony. And furthermore, I think that the same should hold good as in savings banks, making it also a felony charge; and still further, it should be a felony for any officer or director of any building and loan association to loan money, or consent to the same, to any other officer or director, and I would include in that any employé, so that no secretary, some one who has authority above the employé, could go to his cashier, for instance, and say, "Give me \$100 or \$10,000 of the association's money and put my tag in the drawer for that amount." If you make it a felony for the employé, then the authority of the officer or director will come to naught, because he will be afraid of being punished for his participation. Now——

MR. CURTIN (interrupting): Have you any other points to offer? A. Yes, sir; I have quite a lot.

MR. CURTIN: Well, I only wanted to know, because it is getting quite late and I think we have had a long enough session for to-night.

MR. HAHN: Personally, I am willing to sit here until one o'clock in the morning if we can get all we want to know——

MR. CURTIN (interrupting): Well, I have been doing this work ever since I came up here, and I am tired and want to get some rest.

MR. HAHN: So have I.

MR. ANDERSON: Well, I think that it is late enough. I move, Mr. Chairman, that we adjourn until to-morrow night at 7:30 o'clock, in this same room.

MR. CURTIN: I second that motion.

THE CHAIRMAN: The motion is made, seconded, and carried, and the committee therefore stands adjourned until to-morrow evening at 7:30 o'clock, in this room, when Mr. Grange can continue with his statement.

SIXTH SESSION.

SACRAMENTO, CAL., February 15, 1905, 8 P. M.

(All members of the Committee present.)

TESTIMONY OF WILLIAM M. KLINGER.

Sworn.

MR. CURTIN: Q. What is your name? A. William M. Klinger.

Q. Where do you live? A. San Francisco.

Q. What is your business? A. I say San Francisco; I am temporarily residing in San Rafael.

Q. What is your business? A. Adjuster, fire insurance companies.

Q. How long have you been living in San Francisco? A. Fifteen years.

Q. Are you married or single? A. Married.

Q. Any member of your family have any business dealings with any building and loan association? A. Yes, sir.

Q. Which member of your family? A. Mrs. Klinger, my wife.

Q. Who represented her in all the transactions connected with it? A. I did.

Q. What association, if any, did you deal with? A. Capital.

Q. What is its full name and title? A. Capital Building and Loan Association.

Q. Where is its principal place of business? A. I do not know where it is now, but at the time I was transacting business with them their office was at 520, I believe, California street, over the San Francisco Savings Union Bank.

Q. In San Francisco? A. In San Francisco.

Q. California? A. California.

Q. What was the nature of that business? A. Building and loan.

Q. What was your connection with it? A. As a depositor; shareholder.

Q. Was Mrs. Klinger represented in all the dealings by you? A. By me.

Q. Therefore, if the testimony is directed to you, it will be the same as if directed toward Mrs. Klinger, your wife? A. Mrs. Klinger; yes, sir.

Q. What was the nature of your business with them? A. Making monthly deposits. I had twenty-five shares with them.

Q. What was the price per share? A. One dollar per share per month—\$25 a month.

Q. What was supposed to be the par value of each share? A. \$100.

Q. That would be \$2,500 investment? A. That would be \$2,500 investment. Pardon me—I believe it was \$200 a share—\$100 or \$200, I do not remember.

Q. \$100 would be \$2,500? A. Yes, sir.

Q. \$200 would be \$5,000? A. Yes, sir.

Q. Have you the contract under which you entered into it? A. No, not with me.

Q. Are you familiar with its contents? A. Yes, sir; fairly so.

Q. What were the promises made to you in regard to the return of your money? A. That upon giving them thirty days' notice—

MR. HAHN (interrupting): I would like to put in an objection here on that score. The contract is really the only thing you can go by.

MR. CURTIN: I know, but he has not got it in his possession.

MR. HAHN: I know he has not. The complaint, if there is any, must be based on that contract, and it may turn out, on a scrutiny of that contract, that there would be an entirely different state of affairs. If it is a long one, and a technical one, the testimony of the witness as to his memory of a written contract is hardly the proper thing.

MR. CURTIN: The proper thing is this: There are two bills pending here, one to regulate the method by which building and loan companies transact their business, and the other is to regulate the way in which the Building and Loan Commissioners conduct their affairs. If there is a failure on the part of one, particularly Building and Loan Commissioners, I want to get at that, with a view of reaching the delinquencies.

MR. HAHN: I would like to have him get the contract here. I am not objecting to having the contract here, but I would like to have it here, and that would be the basis on which the complaint was made, and then we could intelligently tell whether there was any.

MR. CURTIN: Your objection would be very good if it was to the

method, but this testimony will be directed to the delinquency on the part of the Building and Loan Commission.

MR. HAHN: All right, go ahead.

THE WITNESS: Pardon me, what do you mean by a contract? There was no absolute contract except in the by-laws of the association.

MR. CURTIN: I propose to frame proper amendments that will require that Commission to exercise different diligence from what Mr. Klinger complains of.

Q. The nature of your transaction was that of depositor? A. Yes, sir.

Q. Or investor? A. Yes, sir.

Q. How long did you keep up those payments? A. The first time I entered the association was probably fifteen years ago. At the expiration of about eleven years they paid me \$2,000. It is \$200 a share, Senator Curtin, because I paid them \$10 a month at that time.

Q. What was the total amount you paid in? A. I am getting back to my first experience with the company. I do not remember exactly what I paid in the first time, but at the end of about eleven years they paid me \$2,000. I reentered, taking twenty-five shares after the first payment.

MR. HAHN: Q. When the first stock matured? A. When the first stock matured. Then I took out twenty-five shares. I must have been in there then four years.

MR. CURTIN: Q. Did you realize in either event as much as the total you paid in? A. On the first investment, yes; on the second I never received a cent.

Q. Why did you not receive your money on the second investment? A. When I applied to the secretary of the company, or gave him thirty days' notice, according to the by-laws of the association, he accepted that notice. At the expiration of thirty days I applied for that money, and he said they had no money on hand.

Q. When was that? A. This was October or November of 1903. I believe I made my last payment in October, 1903, giving them thirty days' notice, which would make that money due me in November, 1903.

Q. In November, 1903, did you call for your money? A. I did.

Q. Did you get it? A. No, sir.

Q. Why didn't you? A. They had no money on hand.

Q. What was the reply made to you? A. That they had an overdraft in the hands of Daniel Meyer.

Q. To what amount? A. I believe somebody told me about \$10,000.

Q. An overdraft? A. An overdraft—that they could not pay me the money—no, I am a little ahead of my story. He told me that they did not have the money on hand, but would have it thirty days later, in December. In December, I went to him and asked him for the money again, and he put me off with another excuse. About January or February I applied again, and then he told me that there was an overdraft in the hands of Daniel Meyer for about \$10,000, and that Daniel Meyer served notice on them not to pay money out to anybody until that overdraft was reduced.

Q. Yes, sir. A. I then became somewhat nervous as to the condition of the company, and I stepped into the office of the Building and Loan Commissioners, and asked whether the Capital Building and Loan Association was solvent, and was told that it was.

Q. Whom did you ask for? A. I presented my card to a gentleman there, and asked him if his name was Fields, and he said it was.

Q. There are two: one is Field and the other is Fields. Which one was it?

MR. HAHN: Both gentlemen are here. Point him out to us. A. The gentleman had a darker mustache than this gentleman, if I am not mistaken. Would you mind standing up, please?

MR. HAHN: Stand up.

[Here a gentleman stood up.]

THE WITNESS: This was the gentleman, I believe.

MR. CURTIN: Q. The secretary? A. Although it appeared to me he had a darker mustache at that time. This, mind you, was a year ago.

Q. What were you told by him? A. That the Capital Building and Loan Association was solvent. That is the only question I asked.

Q. That it was solvent? A. Yes, sir.

Q. Did you detail to him your statement? A. No, I did not.

Q. What did you say to him? A. I simply asked him the question whether the Capital Building and Loan Association was solvent.

Q. Were you asked by him as to why you had inquired? A. Not a question.

Q. Did you call there again? A. No, sir; but I sent there again.

Q. Whom did you send there? A. I asked Mr. Tom Gardner, I believe, of the Citizens' Building and Loan Association, told him of my troubles, and asked him if he would not kindly investigate for me, as I felt somewhat nervous about the matter, and he reported to me—of course I dislike quoting some one else.

Q. You do not know whether he called or not? A. He told me that he had called.

Q. But you could not—— A. (Interrupting.) I could not take an oath that he did call.

Q. How much at that time was due you? A. I asked the secretary, Mr. Davis, how much was due me, and he told me sixteen hundred and some odd dollars.

Q. At what time would that be? A. I should judge that would be four years, Senator. I can figure that up easily enough.

Q. What did you refer to by October and November? A. That is when I applied for my money, when I gave them final notice.

Q. That is in October or November, 1903? A. That was in October or November, 1903, and at that time he told me there was about \$1,600 due me—the book value of the stock.

Q. When did you apply to Mr. Fields? A. It must have been in January or February of 1904.

Q. And at that time you simply advised him as to whether the Capital Building and Loan Association was solvent or not? A. Advised him?

Q. You simply inquired? A. Inquired.

Q. Have you ever to this day been able to get your money? A. Not one cent.

Q. Not one cent? A. No, sir.

Q. What were you told at that time by the secretary, or afterwards, of the Building and Loan Commission? A. Secretary of the Building and Loan Company?

Q. Yes, sir; of the company? A. That they had this overdraft with Daniel Meyer, and could not pay me anything until Daniel Meyer was paid.

Q. They had no money on hand, and were in debt to Daniel Meyer besides? A. Yes, sir.

Q. What were you told to do in the matter by the secretary of that company? A. Simply wait time with patience until they could pay me.

Q. Did they make you any other promises? A. Yes, sir.

Q. What were they? A. He offered me—this was about three months ago, I should judge—he offered to transfer to me some deeds; they had some sand lots over in Point Richmond.

Q. What did he offer to do for you? A. To give me a deed to some lots in Point Richmond.

Q. In satisfaction of your—— A. (Interrupting.) Satisfaction of my claim, and I declined it.

Q. Did you ever call on him afterwards? A. Yes, sir.

Q. When? A. That is, I did not call on him personally, but I sent my attorney to him.

Q. Have you been able to get your money out of that? A. Not a cent.

Q. Do you know when it went into insolvency, or the proceedings winding it up? A. No, sir.

Q. Were you made any promise on the strength of your borrowing any money on it, and they would make it good? A. Yes, sir.

Q. What were those promises? A. I was told I could deposit my stock with Daniel Meyer, who would lend me the money on it, and that the Building and Loan Company would pay me the interest that I would pay to Daniel Meyer. I said to the secretary, I thought it was rather strange I could not get my money from them, after depositing it with them, and if I had to borrow money elsewhere, and the association owed me some money, thought I was entitled to some interest, and he said I was, and I borrowed the money for Mrs. Klinger from Daniel Meyer, and he loaned \$1,200 on the shares.

Q. On the security of the shares as well as your personal security? A. Personal security.

Q. Have you been notified that you had to pay it? A. From Daniel Meyer; yes, sir. He brought suit against Mrs. Klinger since I was out of town, and as soon as I get back I will have to fix it up, so that he can not take snap judgment on me.

MR. LYNCH: Q. You have the costs of suit? A. Yes, sir; costs of suit besides.

MR. CURTIN: Q. Have you since looked into the condition of affairs to determine whether or not that if you were advised it was insolvent at that time or in a shaky condition, you could have proceeded and recovered something, whereas now you can recover nothing? A. At that time I placed the matter in the hands of my attorney, and I was advised not to accept in full payment for what was due me the particular lots at Point Richmond that they had offered me.

Q. Do you know what that advice was based upon, whether they were solvent or not? A. No, I can not answer that question as to whether they were solvent or not, but I was advised by Daniel Meyer not to accept it, that the lots were not worth \$1,600.

MR. HAHN: Q. What were the lots worth? A. That I can not state, Senator.

Q. About, do you know? A. Have no idea.

Q. You do not know what percentage of the amount you had invested you would receive had you taken the lots? A. When I say Daniel

Meyer I refer to Henry Meyer, one of his sons, who is the manager of the bank. Henry Meyer said they were practically worthless.

Q. Has this company been wound up yet? A. I do not know.

Q. Do you know whether they have any assets? A. They have some.

Q. Do you know what proportion the assets are to the liabilities?

A. No, sir.

Q. Have you seen a statement of the company since liquidation?

A. No, sir.

Q. Can you get a statement? Have you asked for a statement?

A. No, I have not asked for a statement, as my attorney has attended to that. I can probably get a statement from him.

Q. Do you know whether or not the association was insolvent when you inquired of Mr. Fields in January, 1904? A. No, sir; if I thought they were insolvent—

Q. (Interrupting). Have you any knowledge now that they were not solvent? A. No, sir.

Q. Or that they were insolvent at that time? A. I have no knowledge that they were insolvent. My belief is that they were solvent at that time.

Q. What can we do for you under the conditions? What do you want us to do? What suggestions have you to make? A. Absolutely none to make, Senator.

Q. Have not any to make? A. Simply the money was deposited with them, and it is gone. That is all.

Q. What I was getting at is whether you know of any abuse of the building and loan association system of doing business, or abuse of the law; you know nothing of your own knowledge? A. No, sir. The only abuse that I can mention is this: that they continually accepted my money, and when I applied for it I could not get it. There is certainly abuse somewhere.

Q. How long after January 1, 1904, did they go into bankruptcy or insolvency? A. I did not know until this evening they had gone into insolvency.

Q. You did not know of that? A. No, sir; this evening was the first information I had of it.

Q. As far as you know, the amount of money, to wit: \$1,600, which they informed you was the book value of your stock, was all right; it was satisfactory to you, was it? A. Certainly; I accepted the secretary's statement.

MR. HAHN: That is all.

MR. CURTIN: Q. I only want to ask you one question: Would you consider a company solvent which in January or February, 1904, had not any money in sight, and had \$10,000 overdraft, and could not pay your withdrawal? A. Senator, at that time I had implicit confidence in Mr. Davis, the accountant.

Q. I am asking you the question as to its condition at that time?

A. I will have to answer the question by stating—

MR. HAHN (interrupting): It would not be a fair question.

THE WITNESS: I can not answer it without a few remarks.

MR. HAHN: The reason why it would not be a fair question is this: that under the rules, if they required a notice, and that only one half of the money in the treasury is subject to withdrawal, and if all of their money has been loaned out in advance, and if they have an over-

draft, they may still be the most prosperous kind of a concern, and still not have money to pay out to withdrawing members for a time.

THE WITNESS: I will say at that time I believed just as the Senator remarked.

MR. CURTIN: This is what I am getting at. There is a defect in the law some way. If the Building and Loan Commissioners are not permitted to interfere under that kind of a condition, the law ought to permit them to interfere. If the Building and Loan Commissioners had known of that, and by reason of this defect they could not interfere, I want to know it. If they failed to interfere, and they should have interfered under the law, I want to know it.

MR. HAHN: Q. Suppose the association is a small local, and it has only \$50,000 cash paid in; their money is coming in in dribblets, if all of that stock is sold to monthly installment investors; suppose three quarters of it is to prepaid stockholders who pay in advance; then the only income they get is from the other quarter, who pay their interest money, and what they receive from their mortgages. That amounts to a very small amount of money. Suppose two men who have \$10,000 paid-up cash stock want to withdraw at the same time; the by-laws require thirty days' notice for withdrawal, and only half of the money is subject to withdrawal; suppose they paid out every cent, and they had a chance to make a loan; if the income is only \$300 a month, they would have to borrow this money, and they would have an overdraft which they cannot pay; are they insolvent?

MR. CURTIN: I will answer you that. No institution, in my estimation, does a safe, sound business which has to pledge its securities to borrow money.

MR. HAHN: Suppose they went to the bank, and the bank took their note, and they did not pledge securities, and I know of a great many building and loan associations that borrow all the time from \$5,000 to \$10,000 without putting up any securities whatever. The bank loans it upon an overdraft.

MR. CURTIN: No institution is safe that does that.

MR. HAHN: Why is it not safe?

MR. CURTIN: I will answer it. Because no bank, and this is virtually a bank, has a right to loan all its money out on certain securities, and then pledge its securities, and the difference between what it gets and what it pays is its only margin of profit.

MR. HAHN: I am citing an everyday occurrence that is being practiced by most of the associations, and not putting up any of their securities as collateral, and they have them intact.

MR. CURTIN: And I will answer you, that it is an everyday occurrence for them to go through insolvency, and the stockholders get left.

MR. HAHN: By reason of that?

MR. CURTIN: That is one of the reasons.

MR. HAHN: Is it not one of the best incidents in the existence of a building and loan association that all this money is out and drawing interest.

MR. CURTIN: No; I do not think so.

MR. HAHN: If it had a whole lot of money on hand it would be losing money, because it had no interest on it.

MR. CURTIN: Suppose it got Mr. Klinger's money on the promise of paying 5 per cent per annum and they make a loan of 8 per cent, and

they agree to pay him 5 per cent, where is the profit? I am judging by that. You heard the other night the danger of one taking from one and loaning to another. When this occasion arises they are confronted with the situation that they have no money on hand to pay it.

MR. HAHN: You have not got the point.

MR. WOODWARD: I think I can make a suggestion here to Senator Curtin. I think what Senator Hahn means is this: We will assume that a building and loan society has got five thousand shares subscribed. Those shares draw a dollar a month in an association. They are presumably reputable members, because they pay their dues right along. Then, the association stands on the proposition that it is going to have \$5,000 a month income; they have loaned to the full amount of the capital on hand. They have, thereafter, opportunities to make other loans, and desire to accommodate some of their members and their stockholders; they have a chance to make a loan, and they get the approval of their finance committee, and they go to the bank and make an overdraft, and borrow whatever they think is necessary.

MR. CURTIN: I agree with Mr. Grange on the subject, that that is a dangerous sort of business, and Mr. Hahn's explanation is about as clear as the average investor understands it. I am not making any complaint of its explanation of it. To the outside man who deals with it, you confront him with it, and he says, "That is something I do not understand."

MR. LYNCH: At the same time, if a building and loan association has to keep money enough on hand, not bearing any interest, to pay off these withdrawals that come along, they would be losing money right along.

MR. CURTIN: I understand that; but you leave the opportunity for them to take too many risks in this matter.

MR. ANDERSON: In order to economize time I would suggest that all matters requiring argument, which is a matter that properly comes before the committee when we come to draft our bills, be deferred until that convenient time, and that we draw from the witnesses before us such information as may seem advisable.

MR. CURTIN: I quite agree with you. I am through with the witness.

MR. WOODWARD: That will be the order.

MR. HAHN: I have nothing further.

MR. CURTIN: I have nothing further. I want to ask Mr. Fields some further questions, and then I am through.

MR. WOODWARD: Do you want to take up Mr. Fields?

MR. CURTIN: Yes, sir; just on this one point.

TESTIMONY OF JAMES L. FIELDS.

Recalled.

MR. CURTIN: Q. You have heard the testimony of Mr. Klinger just now? A. Yes, sir.

Q. Do you recall the occasion of his visiting you regarding the Capital Building and Loan Association? A. I do not recall the occasion of his visit. Of course there are parties coming in there all the time, and I do not know who they are.

Q. You do not remember that particular instance? A. I do not remember that particular occasion.

Q. Do you recall now the last time you examined into the condition of the Capital Building and Loan Association? A. The examination was made, I think, in July or August, 1893.

Q. July or August, 1893? A. 1903.

Q. Can you speak from memory as to the condition you found it in then? A. Memory?

Q. Do you consider an institution solvent, within the meaning of the building and loan law, when an application for withdrawal of \$2,000 is filed, the thirty or sixty days' notice required by law is awakened, and at the end of that time the company has no money on hand to pay the withdrawal, and is in debt some \$10,000 besides? A. Yes, sir.

Q. You do? A. I do.

Q. Then, an institution is solvent which has not cash on hand to the amount of \$1,000, and is \$10,000 in debt? A. It is solvent under the building and loan law, under the rulings of all the courts of the United States, so long as the available and collectible assets are equal to the liabilities, all outside liabilities, and to the liabilities to the shareholders for dues and profits, if you please.

Q. Then, under the present building and loan law the company may not have on hand at any given time the money with which to meet a contract that expressly provides that the holder of it may have his money at the end of thirty days, which contract provides for notice for it? A. That is right.

Q. Therefore, you consider that the law which says, or the by-law of the company which says, that a man may have his money withdrawn and paid to him by giving thirty days' notice in writing therefor, and if after giving that notice, the company has no money with which to pay it, that that company is solvent? A. I do, because the courts have decided this proposition.

Q. Pardon me just a moment. The court makes its decision upon the statute as it exists? A. They do.

Q. Therefore, the statute is the only guard of protection or shield that the company has to stand; they stand upon the statute? A. They stand upon the statute.

Q. Do you consider that a wise statute? A. That is not for me to say.

Q. I am only asking you, because we are dealing with that question. A. I understand that perfectly well, but under an interpretation of the building and loan laws all over the United States that is the rule.

Q. That is not what I mean. You understand that we are here for the purpose of getting information to cure the deficiency in the law as it exists. I want to ask you if you believe that that is a just and wise and proper law which provides that a building and loan association may be incorporated under it, and carry on its business, and at the same time that law provides that under a contract made between an investor and that company, which provides that he may withdraw his money, be it much or little, upon giving thirty days' notice, that having given that notice, and not having a dollar to pay it, it is still solvent? A. It is, because that contract of which you speak is not a contract with an outside party; it is a contract with the shareholder of the association, made to the association, of which he is a component part, which is decidedly different from a contract made with an outside party.

Q. That is very well. Then, the building and loan law is framed upon an idea or upon a theory that a board of directors may so manage its affairs that those who deal with it are absolutely bound by any rule which the board of directors may see fit to adopt with reference to the disposition of its funds? A. Bound by the by-laws of a corporation, which is supposed to be made and attended to by the shareholders of the corporation themselves, with which they, as a part, make their contracts.

Q. I understand. Do you not think that there is opportunity for an amendment of those laws which would prohibit the disposition of the money to the extent that there may not be at any time sufficient funds from which to draw their money? A. If that was the case shareholders would then be obliged to accept a much lower rate of income, because of the amount of dead capital that would be required to remain on hand, which would be earning nothing.

Q. Under the conditions now they not only accept a lower rate of income, but do not get any of the interest? A. In specific cases.

Q. You have quite a number in this State? A. Well, very few comparatively.

Q. You have got the Pacific Coast; that is one? A. Yes, sir.

Q. You have got the Capital Building and Loan; that is another?

A. Capital Building and Loan, that is another; a very small one.

Q. You have got one in Los Angeles; that is another. A. Winding up, yes.

Q. How many more do you know of? A. There is one or two more winding up voluntarily.

Q. Is it your experience that each man who invests with those companies thoroughly understands that condition that you have now described? A. I can not say that they do. They have the chance to understand it if they would take the chance to study it up.

Q. In other words, take the trouble to study out all the conditions, they would understand the conditions you are talking about? A. If they would take the trouble to study the by-laws and their contracts.

MR. CURTIN: That is all.

MR. HAHN: Q. As a matter of fact, most all of the building and loan associations in this State have a clause in the by-laws known as the withdrawal clause, have they not? A. Well, they have a clause with reference to withdrawals.

Q. Yes. A. Yes, sir.

Q. And most of them have a proviso in the by-laws similar to that of the savings banks, which prevents a run upon the association or requiring a notice, do they not? A. Yes, sir.

Q. That notice varies from thirty to ninety days, does it not? A. Thirty to sixty, I think; sixty is the limit.

Q. As a matter of fact, do not most building and loan associations have another clause that only one half of the money in the treasury is subject to withdrawal at any time? A. They have that clause, following the State law.

Q. Is not that a safe clause to have in the by-laws for the protection of all the stockholders? A. Most undoubtedly.

Q. Would a building and loan association be safe if it did not have such a clause in it? A. It would not.

MR. CURTIN: Q. Look at this memorandum I show to you, and see if

you can recall it to memory. [Handing paper to witness.] Do you recall writing such a letter? A. Yes, sir.

Q. Do you recall the fact—this is the letter I called your attention to last night. Do you recall the date when you last examined into the affairs of the Pacific Coast Savings Society? A. Last May.

Q. This letter is dated September 19, 1904; do you know to whom it was addressed? A. I do not know now.

Q. Having come from the office of the company itself, it would evidently be that it was sent to the company? A. To the company?

Q. Yes, sir; Pacific Coast Savings and Loan. A. No, I do not think it was sent to the company, because those were sent to outside parties; it would not be sent to the company.

Q. Here is a letter with which that was sent. Inasmuch as it is not addressed to any one, I want to get at whom you sent that to? [Handing paper to witness.] A. I can recall the idea of that. That letter was a letter written to a party out in the country, and about that time, some one from the office—I think Mr. Smith was in there, and the question of the status of the proceedings, etc., was being discussed, and I told him of the several complaints that had come in, and asked him with reference to them, and told him that I had answered the letters, and how I had answered them. I showed him a letter in the copybook and he asked me for a copy of one of those letters, which I gave him, which was a copy of the letter sent to the interior.

Q. Did you furnish him with a copy of this letter? A. Yes, sir.

Q. Were you aware that upon that basis he endeavored to satisfy depositors? A. No, sir; I was not.

Q. You state in here, "The rules of this and all associations based upon the law of the State do not contemplate or compel the keeping of funds on hand with which to meet withdrawals and maturities." A. Exactly.

Q. Do you not think the law would be better, and afford better security for the investors if a certain per cent of the capital paid in were kept on hand for withdrawals—at least to the extent of \$2,000 cash on hand; do you think the law would be better if amended in that particular? A. Well, \$2,000 would be a small percentage, perhaps.

Q. In the instance Mr. Klinger testifies about it would have paid his \$1,600. In the instance in which this letter was written to me it would have paid the \$700? A. Then, if that was paid out, the next one who comes in in twenty-four hours would have to wait.

Q. Do not these contracts provide that they are payable only on certain anniversaries; for instance, if an investment is made in January it is not payable the next month? A. No, they are not payable the next month.

Q. On anniversaries? A. Not necessarily on anniversaries.

Q. They do not provide for that in the same way as insurance companies do? A. No.

Q. What is the rule of their by-laws? A. There is no rule with reference to that in their by-laws.

Q. That they may be surrendered at any time? A. That they may be surrendered at any time in many of the classes of associations. In some of the larger ones, like the Phoenix, like the Continental, and the Renters, and those large ones, operating on a general plan all over the State, they may require that there shall be at least twelve monthly payments paid in.

Q. That is what I am getting at. A. Yes, sir.

Q. The by-laws do not provide, for instance, that an investment on the first day of the month shall be surrendered on that anniversary—for instance, on the first of each month—but may be surrendered at any time; is that what I understand? A. It contemplates a surrender at any time after a specific number of months have passed.

Q. Therefore, if a contract is made to-day, do you mean to say that their business is such that there is—— A. (Interrupting.) There might be one or two or three or half a dozen withdrawals every day.

Q. That would depend on the amount of the investment in the first place—depend on their business? A. It would ordinarily depend on the volume of business, of course.

Q. You state in this letter, "The rules of this and all associations based upon the law of the State do not contemplate or compel the keeping of funds on hand with which to meet withdrawals and maturities the same as in the case of savings banks." Why did you make that distinction? A. Because savings banks require a certain amount to be kept on hand. That is the State law.

Q. Don't you think the State law could be amended so as to meet this deficiency and permit building and loan companies to make a fair return for their money? A. It might permit what some would call a fair return for their money, and others would not call it so; I can not say as to that.

Q. Do you not think that there should be an amendment to the law, requiring a certain percentage of the total amount of cash to be on hand all the time, so as to meet some withdrawals? As it is now, it is evident they do not keep a dollar on hand, or need not do so? A. They are not supposed to keep a dollar on hand in building and loan associations.

Q. And not having a dollar on hand, they may be permitted to hypothecate all their securities, to borrow all they see fit, and not have a dollar to pay any one? A. They do not do that, as a rule.

Q. Here are two instances I have cited where it has been done. A. They have borrowed to a certain extent, and perhaps hypothecated and perhaps not.

Q. In these two instances they are winding up their business? A. It does not necessarily follow because an association does that that it is going to wind up.

Q. Here are two instances where it is winding up? A. Yes, sir.

Q. Do you know of any instance where that has been done where that has not followed? A. Dozens.

Q. Do all of them hypothecate their securities? A. They do not all hypothecate their securities.

Q. They borrow money on them? A. They do not borrow money on them. The large percentage of associations can operate on an overdraft, without putting up a dollar of security. I know of plenty of associations, that are not classed as great big ones either, that can overdraw \$20,000 or \$25,000 simply on drawing a check, without saying a word.

Q. And those that have to hypothecate are those that are not in such good standing? A. That the directors do not have such good credit at the bank.

Q. I want to ask you this question. You state further in here, "And in the event that funds be not on hand with which to meet demands

for withdrawals and maturities, then such withdrawals and maturities must be registered and paid in the order of registration from the available income of the association?" A. Yes, sir.

Q. Do you know whether or not the associations observe that rule, particularly in this: that as fast as the claims are registered, the cash coming in is directly applied to the payment of them? A. The law contemplates that one half, I think it is, of the income of the association, from all sources, shall be applied to the payment of withdrawals and maturities. Of course I have heard claims made that they did not always pay them in the same order, but I have not been able to get any absolute proof of violation of that order.

Q. Where they have been unable to pay them in the order of their withdrawals, what do you suggest or know as the reason they have not? Is it a failure to realize upon their loans? A. Sometimes it might perhaps be failure to realize, or it might be because of a reduction in the company, by reduction of the shares, and so on, so that they would have to reduce in the company.

Q. If the cause results in a failure to realize on their loans, it must be apparent that the loans have not been very good ones? A. Not necessarily.

Q. Why? A. Because the loans are all made on long time.

Q. Do they not provide for monthly payments? A. Monthly payments, yes, of their regular installments; but that does not necessarily give them the right to call in the balance of the loan.

Q. I understand; but I am getting at the question now of the examination of those loans. In the examination of those loans, if the loans fail to materialize, it would be because they were not good loans?

A. If the party failed to pay up there would be some defect in the loan or the moral hazard or the ability of the party to pay.

Q. If the payment of the income is to be based on those loans, it starts out with the proposition that those are good loans? A. Yes, sir.

Q. And if they failed to materialize on the basis on which they started, it would be because the loans are not good? A. The security itself might be good, and the borrower might be placed in such position that he could not meet his payments, even though the security were good.

Q. I want to know how often the Building and Loan Commissioners examine into those particular loans? A. Once a year.

Q. Once a year? A. Yes, sir; that is all.

MR. HAHN: Q. Is it not to the interest of a building and loan association to pay withdrawals just as soon as they can pay it? A. It is.

Q. Is it not the fact that the longer they put off payment, the more the men howl and kick, and the more notoriety the association gets? A. That is a fact.

Q. Then, as a matter of fact, no law made would be of any assistance along that line? A. I can not see how it could be much; if they did not have the money to pay, they could not pay.

MR. CURTIN: I think I can see how it can be remedied all right.

MR. HAHN: How?

MR. CURTIN: When we get to the recommendations I will show you.

MR. WOODWARD: Q. Mr. Fields, there was something said in the testimony last evening in reference to the ratio of operating expenses to the profits or business of the concern. In your judgment, are the so-called "national" societies more expensive in their operations than

the so-called "locals"? A. Well, I do not like to speak with reference to that without having the figures directly before me. I believe I furnished some figures last evening, but we did not give the ratio of expenses to the income. I do not know whether I have got those figures with me now or not that give that. [Witness looks at memorandum.] You mean the ratio of expenses to the income?

Q. To the business done, as to the number of shares in existence, for instance? A. Based on the number of shares—take such a thing as that on the shares is absolutely an unjust basis, to base it on shares. The only accurate basis that can be devised that I can see, it must be a percentage on the average loans in force, or the average capital.

Q. It was suggested here last evening by some of the witnesses—I do not remember who—that it would be a good thing to frame a law making the actual expense per share a certain amount, and make it not to exceed that amount. In your judgment would that be a good law? A. I do not see how it could readily be done to fix a maximum of expense that should not, under any circumstances, be exceeded, because conditions might arise that would make larger expenses in some years.

MR. HAHN: Q. The first year, for instance? A. Well, I am not speaking of the first year. I am speaking now of a growing association, after it has continued business for some time.

MR. WOODWARD: Q. The point I want to get at, Mr. Fields, is this: Of course it is presumable with all investors who invest in building and loan associations that their stock will mature as rapidly as possible; it is to their interest? A. It is to their interest to mature it as soon as possible.

Q. If the income is utilized in salary account and things of that kind, it will have to run along for some years before it will mature? A. Unquestionably.

Q. What would you say of a building and loan association that had four thousand shares in existence in which the salary account was \$7,000 a year, if such a thing existed? A. With how many shares?

Q. Say four thousand shares. A. That would depend on whether it was a "local" or a so-called "national," or with shares of \$200 each or \$100 each.

Q. I am speaking of the "locals." A. Some of the "locals" have \$200 shares and some \$100 shares; they are not all uniform in that respect.

Q. In other words, would you not consider an average of \$600 a month to take care of four thousand shares of stock an excessive charge? A. For salaries and ordinary expenses; yes, I should think it was.

Q. Do you know of any such "locals"? A. There has been such in the past.

Q. Then, some of the so-called "locals" are being operated for the personal gains of the officers rather than the shareholders? A. In the way of salaries, unquestionably.

MR. CURTIN: Q. Mr. Fields, do you think it would be possible to so amend the present law as to define the question of insolvency better than it is now defined with regard to withdrawals? A. The existing law is defective in this respect.

Q. Effective or defective? A. Is defective in this respect: That it undertakes to define what the capital stock consists of, and that defini-

tion would take in reserve—not only the dues, but the profits—that is, the apportioned profits, dividends credited to the shares; it would take in any reserve funds, and it would take in any undivided profits, which is decidedly unjust. If you undertook to use the dues paid in—that is, capital plus the apportioned profits—then you would get a figure which is larger than the ordinary or average surrender value. The best approach to that that I can think of now would be to define the question of insolvency based upon the dues capital, plus the proportion of the apportioned profits or dividends, if you may call them such, that is subject to withdrawals; in other words, that that would be the withdrawal value of the shares—actual withdrawal value of the shares would more nearly define the real question of the solvency, according to my notion, than most any other definition.

MR. CURTIN: That is all.

TESTIMONY OF CLARENCE GRANGE.

Recalled.

MR. CURTIN: Q. I do not care to question Mr. Grange further than on the subject I am now speaking of. Mr. Grange, what do you think is the condition of a building and loan association which, by its by-laws, provides that the stock may be surrendered or the investment of the money returned upon giving thirty days' notice in writing, and then, at the expiration of thirty days' notice in writing, the company has no money to pay that, even though it be but \$700, and it is \$10,000 in debt besides; what would you consider its condition so far as its solvency or insolvency is concerned? A. The fact that they were unable to pay the withdrawal would have nothing to do with the solvency of the institution, because under the present law the associations are expected to keep all of their money loaned on long-time loans; are not expected to keep any reserves on hand; are not permitted to make any investment in quick assets. They have nothing upon which to realize to pay withdrawals. I think that if the associations are expected to pay withdrawals when asked for in the ordinary course of business—not taking into consideration a run—that the association should be required to carry a certain amount of what might be termed quick assets—very similar to the manner of savings banks. Savings banks, under the laws of this State, as I understand it, invest 50 per cent—are required to invest 50 per cent of their money in mortgages; the other 50 per cent may be invested in quick assets. Under the laws, as they now stand, a building and loan association has no authority to make any investment in quick assets, and I think the laws ought to be amended to provide that a building and loan association may invest in quick assets.

Q. You and Mr. Fields agreeing in the main upon that one subject, the question of the solvency or insolvency, or ability or inability of the investor or depositor to withdraw his money is one purely of contract?

A. Purely.

Q. And he becoming a component part of the association is bound by the laws and takes his own chances? A. Yes, sir.

Q. And therefore, if he is unable to get his money back, as he expects it, it is because of the fact that he has joined hands with an

institution that can be so run under the laws of this State? A. It could not be run any other way, nor could a savings bank be run any other way.

Q. Then, he could have no complaint, because he is a part of the whole concern? A. Exactly.

Q. And because the management is intrusted to others, in which he has no voice to exercise it if he has a mind to exercise it? The question of withdrawing is one of contract purely? A. Purely.

Q. Then there can be no complaint under the present law, so far as that is concerned? A. None whatever.

Q. Could not an amendment to the present law be made so as to permit or require a certain amount of cash on hand to meet withdrawals, and yet not to impair to any great extent the business ability or future of the company? A. I do not think a building and loan association should be required to keep cash on hand.

Q. To any extent whatever? A. To any extent whatever; but I do think that a building and loan association with a large liability should be required to carry a certain amount of quick assets.

Q. If that were the case, then it would follow that the law must be amended so as to limit the investment of a certain amount of the funds in long-term loans, and a certain amount in available securities? A. Available securities.

Q. In other words, it would be as you suggested about the savings banks: if 50 per cent of their cash is in mortgages, the other should be in such bonds or securities so that nearly all of it could be converted into cash? A. I think 50 per cent would be too much, because savings banks are required to carry a reserve of 50 per cent; but I think a building and loan association should be required to carry quick assets of at least 10 per cent of its liabilities.

Q. Then it comes right back to the question, as Mr. Fields stated a while ago, that a great deal of complaint can be traced to the fact that those doing business with these associations fail to fully appreciate and understand the by-laws? A. I think a majority of the people who invest in building and loan associations understand when they go in that they can only withdraw 50 per cent of the receipts of the institution; but when the institution has no receipts, or when their receipts are limited, they forget about that, and become dissatisfied.

MR. CURTIN: That is all.

MR. HAHN: Q. Mr. Grange, you referred to certain kinds of assets of a company, consisting of what you term quick assets; what do you mean by quick assets? A. I mean convertible bonds.

Q. Name what you would call convertible bonds? A. Well, for instance, State bonds, municipal bonds—

Q. What do you mean, State of California? A. If there were any issued: United States bonds, municipal bonds or warrants.

Q. Mr. Grange, what rate of interest do United States bonds bear that you could obtain for this purpose? A. Probably 2½ per cent.

Q. About what rate of interest would city bonds or municipal bonds bear that could be obtained for this purpose? A. Perhaps 3½ per cent.

Q. Mr. Grange, could a small local association, doing business in a small town, invest very much money in that kind of security? A. No, sir; it could not.

Q. As a matter of fact, if they only invested a small amount of their

funds in that kind of security, would it do them very much good, in that kind of an association? A. No; it could not.

Q. Then, in your opinion you would not advise that that kind of an association be placed under a law which would be compulsory relative to the quantity of their capital stock being invested in that kind of security? A. No, sir.

Q. Then, in your opinion, that would be a very good course to pursue with respect to the large——

A. (Interrupting.) Corporations.

Q. —Corporations, such as the State Mutual of Los Angeles, and other big concerns in San Francisco? A. Yes, sir.

MR. ANDERSON: Mr. Grange, I would like to ask a line of questions, and not relative to the line of thought that the other Senators have been asking, and if they are through with that line of thought I would like to take up an idea I have in mind, and therefore I would like to have Mr. Wade sworn.

MR. HAHN: We are not through with Mr. Grange yet.

MR. ANDERSON: I want to have the three of them together.

MR. HAHN: I object to that. Let us get through with Mr. Grange and get him off the stand.

MR. ANDERSON: Perhaps I have not made myself clear. Our object is to get the bills in an intelligible and satisfactory condition, and I want to have a discussion over these bills with these three experts, as we may have none others here, and what one don't know, another may, and to get their ideas together, and any of you gentleman can ask any of them you wish when on the stand questions relative to this line of thought, just the same as we discussed the matter amongst us.

MR. WOODWARD: I want to ask Mr. Grange a few questions when you are through.

MR. CURTIN: I am through, so far as I am concerned.

MR. HAHN: I was going to ask Mr. Grange some questions when he finished his story. He started in last evening, and he did not finish. He had only got part through.

THE WITNESS: That is true.

MR. CURTIN: I was going to ask him if he was through.

THE WITNESS: I have got a whole lot to say.

MR. ANDERSON: The thing is this: I would just as leave ask Mr. Wade these questions without being sworn, only I want to have the privilege, when I start in on my line of thought, of questioning any of these gentlemen.

MR. WOODWARD: We will finish with Mr. Grange, and then we will take this matter up later.

Q. Go ahead where you left off last night. A. Last night I left off with the question of membership fees and withdrawal fees, wherein I suggested that all membership or withdrawal fees should be stated plainly in the contract and in the application for stock. While I am on that subject——

MR. HAHN (interrupting): Just a moment. You say applications?

A. Applications for the stock.

Q. On the certificates for the stock? A. On the certificates for the stock.

Q. Would you suggest that it be placed on the face or the back? A. I would suggest that it be placed on the face, in the body of the certificate.

Q. So that it would be plain and every stockholder should see it?
A. Yes, sir.

MR. LYNCH: Q. Does every building and loan association draw its own contract—form and everything? A. Presumably.

Q. Heretofore there has been no regulation on it? A. No, sir. While I am on the question of withdrawal fees or membership fees, I would call the attention of the committee to the impossibility, perhaps, of any law being framed to regulate that portion of the business, first, on account of the constitutional objections; and second, because of the theories of business.

MR. WOODWARD: Q. May I ask a question now, Mr. Grange? A. Yes, sir; I would like to have you.

Q. In some life insurance policies there is printed on the back of them, 1, 2, 3, 4, 5, 10 years, and so on down, showing the withdrawal value of that policy and the amount you paid? A. Yes, sir.

Q. In other words, after you have paid so many years you can go to the company and get so much money for your policy? A. Yes, sir.

Q. Could not such a thing be printed on a building and loan association contract, saying when you have been in there seventeen months it is worth so much? A. Yes, sir.

Q. And when in there thirty-four months it is worth so much? A. Yes, sir. It not only can be done, but is done by some associations in this State.

MR. HAHN: Q. Could that be done, Mr. Grange, by a small local in a small town, when they are starting in to do business? A. That would be a difficult question to answer, because the small local association that starts, starts insolvent at the day of its commencement of business, and it takes a certain period of time before the association overcomes that condition of insolvency.

MR. HAHN: That is why I asked the question.

MR. WOODWARD: Q. To provide against that, Mr. Grange, could it not be devised where there would be no special withdrawal value the first year? A: Yes, sir.

Q. In other words, no withdrawal value whatsoever the first twelve months? A. Yes, sir.

Q. The thirteenth month worth so much, and the fourteenth month worth so much? A. That would be true in the associations in larger towns, but not with some of the country "locals," because —

Q. (Interrupting.) How would that do as applied to the "nationals"? A. That would be perfectly right, because a national association, as it is commonly understood, can not at this late day start business, and start business successfully, without a capital.

Q. Mr. Grange, if such a system were devised and printed on all contracts of the "nationals" and showed absolutely upon their face the value of it at the time, would not such cases as have been cited by Senator Curtin—in those instances, would not those parties know at the same time what their contract was worth in any one month? A. Yes, sir.

Q. In advance? A. Yes, sir.

Q. So that there could be no settlement between them and the company as to the amount? A. That is correct.

Q. The only question that could arise would be as to the payment of it? A. Yes, sir.

Q. That is what I thought. A. Taking up the question of withdrawal

or membership fees, there are two theories of operation: one, that the membership fee must be only sufficient to defray the actual commission paid to an agent for obtaining the stock, or in other words a portion of the expense of putting the business upon the books of the corporation. The balance of the expense, such as the salary of the agency manager, traveling expenses, and various other expenses attendant to an agency business, should be paid out of the profits of the institution, to the detriment of the persistent member. The other theory is that the withdrawal fees or membership fees should be sufficient to defray all of the cost of putting the business upon the books, not assessing any portion of that cost to the persistent member. The building and loan association people of this State—I am referring now generally to the companies in existence—are anxious to secure the passage of an Act limiting membership fees or withdrawal fees to \$1 per share for the purpose of limiting competition, because it is a recognized fact by all building and loan associations that the stock can not be put upon the books of the corporation for \$1 a share and pay all of the expenses incident to the business.

[Here a recess was taken for five minutes.]

THE WITNESS: Before I go on, Mr. Curtin, do you wish to ask me any further questions with reference to withdrawal fees or membership fees?

MR. CURTIN: No, not just now.

THE WITNESS: My statement, when I left off, was that the associations of the State would like to see a limitation placed upon the withdrawal fees for the purpose of suppressing competition in the organization of new institutions, because a new institution can not, under the conditions as they exist to-day, organize and start business on a withdrawal fee of \$1 per share.

MR. CURTIN: Q. Mr. Grange, in directing your attention, let me inform you at the outset that I sit here personally feigning to represent the poor depositors who know nothing about these companies whatever, and I am personally sitting here as one who does not know anything about building and loan associations whatever. I may have other knowledge, but make yourself as clear as you possibly can.

THE WITNESS: The question of policy in the associations in regard to membership or withdrawal fees amounts to this: Shall we charge a fee sufficient to cover the cost of putting the business upon the books and assess no part of that expense to the persistent shareholder, or shall we pay a portion of the expense of putting the business upon the books out of the profits of the institution?

Q. You realize, Mr. Grange, that it will be necessary for a man making an investment, and desiring to withdraw, it would be necessary to compensate the company for clerical help, to keep track of his account, and therefore it would insure business being carried on, but it should be stated in the contract? A. It should be stated in the contract. No withdrawal within two years of the issue of the stock can be made without a loss to the association.

Q. None within two years? A. None within two years. The average expenses distributed render any certificate that remains with the association for less than two years an undesirable certificate. On the question of the division of the profits, there are no less than twenty-five different methods of dividing profits of building and loan associations. Some of them contemplate an equitable division, based upon the amount

paid in, without regard to shares; some of them divide their profits by stipulated and agreement rate per cent, and then dividing the surplus profits among the shares. The favorite rule is what is known as the Dexter rule. The Dexter rule contemplates simple interest between dividend periods upon monthly payments, placing the interest thus accumulated to the credit of the stock, adding it as if it were a cash payment to the monthly installment. Then, at the next dividend period, that whole capital is compounded again. I think that any serial division of profits, or any division of profits, excepting based upon the amount of dues paid in, participated according to the ordinary rules of calculating interest, should be provided for by law. I think further, that for the protection of the shareholders, the directors of a building and loan association should be required, within thirty days after the association has met with a loss, to report that loss to the Building and Loan Commissioners, and their failure to so report should render them personally liable for the loss to the stockholders. My reason for that is this: The practice of the Commission is to examine the associations once a year after the regular annual report has been sent in by the corporation. That examination may be made within a week; it may be within a month or two months or three months after the receipt of the annual statement. The Commission has no knowledge up to that time of any losses that may have accrued to the association during the year, nor have they even then any knowledge of any losses that may have accrued to the association between the date of the receipt, or the date of the end of the fiscal year and the date of their examination. I think the Commissioner law should be so amended that the Commissioners should be required to pay unexpected visits at random throughout the year to the building and loan associations, examine them, not as of the end of the year, but as of the day upon which they pay their visits.

Q. Stop right there. Am I interrupting you? A. Not at all.

Q. Going right there to that statement you made, if the directors were personally liable, what avail would that be if the directors were technically irresponsible? A. None whatever.

Q. Then, would it not be well to have a fine, or removal, or some other penalty for the benefit of the stockholders? A. I think the only penalty that you might impose upon the directors would be the civil liability and vacation of office.

Q. That is what I say, penalty of removal? A. Yes, sir.

Q. And that penalty be available to any of the stockholders? A. Yes, sir.

Q. That is what I want to get at. A. Yes, sir. If the Building and Loan Commissioners would pay unexpected visits to the associations— if the associations would be constantly in dread, so to speak, of these visits, they would have their affairs straight, because they would not know at what date they would be called upon to make a showing. The law should first require, before any examination of the books were made by the Commissioners, that the Commissioners should count the cash, investigate the bank account, investigate the assets; then investigate the liabilities. So that it would not be within the power of the association or its officers to make good temporarily any shortage of cash for the purpose of deceiving the Commissioners. When I was Commissioner that was my method. I paid unexpected visits, without notice, to the associations; went into the association's office, and the first thing

I demanded was their cash, and I found many and many a secretary short. Another thing: I think that the building and loan laws should be further amended so as to provide that the Building and Loan Commissioners might require, at least twice a year, at unexpected periods, that all associations in the State should publish, in a newspaper of general circulation in the county in which the association is located, a statement of its assets and liabilities, and such other information as they deem advisable for the public to know, similar to the requirements upon savings banks and other banks in the State. I think that the utmost publicity should be given to all of the transactions of all of the associations under the control of the Commissioners.

MR. HAHN: Q. Mr. Grange, excuse me. I would like to ask you if it is practicable for any building and loan association to so deposit its securities with a trust company, or with the Secretary of State, in order to prevent the securities being juggled with by any official or directors? A. It is not only possible, but it is practicable, and it is required in a great many States of the Union.

Q. Are there any associations in this State that now practice this depositing of their securities? A. Yes, sir.

Q. All of the securities of the association? A. Yes, sir; all of them, excepting the stock-loan notes, which come and go, and it would be impracticable to deposit them.

Q. I mean real estate? A. Real estate loans and other securities.

Q. What do they deposit? A. They deposit the trust deed or mortgage and the note.

Q. And when is that deposited? A. When it is returned executed.

Q. Before recording? A. It can not be deposited before recording.

Q. You say executed? A. After recording, of course.

Q. How long does it remain with the depository or trust company or Secretary of State? A. Until withdrawn by reason of payment, repayment, or foreclosure, and then certain safeguards are thrown around the removal by requiring a certain number of officers of the association, or by a resolution of the board of directors, duly certified to.

Q. Authorizing some person to get this security? A. To get this security; yes, sir.

Q. Whatever it may be? A. Yes, sir.

Q. Is the security returned before the mortgage is satisfied of record?

A. No, sir. The practice in the State of Washington, for example, and I think the State of Oregon—I am not sure about Oregon—is this: that after the satisfaction piece or reconveyance has been recorded, the County Recorder issues his certificate certifying to the fact that the reconveyance or satisfaction of mortgage has been filed for record, and upon the delivery of that certificate to the Secretary of State or to the trust company, together with a duly verified resolution or statement of the officers of the corporation, having knowledge of the fact, certifying that the corporation has received its pay for that particular loan, they then surrender.

Q. Let me ask you this: Do you think that we ought to amend our building and loan association laws to incorporate such a feature in it?

A. I do.

Q. And do you think it would be practicable to do so in this State?

A. Absolutely.

Q. Do you think by such means a repetition of what Mr. Corbin has been charged with could not take place? A. No, sir.

MR. HAHN: That is all I wish to ask you on that subject.

MR. CURTIN: Q. Mr. Grange, an investment and building and loan association, after it has sold one of its bonds—I think you would call it bonds—if a person has paid right along for two or three or four years, and he desires to obtain from the company a loan on that, they loan him 75 per cent? A. 90 per cent.

Q. They loan him 90 per cent of the surrender value? A. Yes, sir.

Q. Do you consider that loan as one of those securities that should be deposited with the State Treasurer in order to do business? A. No, sir.

MR. ANDERSON: Q. I had a thought in regard to the line of questions propounded to you by Senator Hahn, touching the matter of placing your securities with third parties, trust companies, Secretary of State, or whoever it might be thought was a proper depository. I understand that you advise the depositing of all securities other than loans on stock with a State officer, or with a trust company, to be kept until repaid; that is your statement? A. Yes, sir.

Q. Then you advise this on the ground of better security? A. To the investing public?

Q. Yes, sir. You believe, then, it would operate to decrease the opportunities for irregularities on behalf of the officers of the corporation? A. Yes, sir.

Q. Do not the terms of the contract and the ordinary rules of business require that all payments be made to the association? A. Yes, sir.

Q. These payments are ordinarily made in installments, monthly, are they not? A. Yes, sir.

Q. Then, each payment made decreases the real value of the mortgage or other security on deposit, does it not? A. Yes, sir.

Q. That being the case, then, what is the real value of any particular mortgage as an available asset when final payment has been made to the officer of the association, the securities still being on deposit? A. The theory of this depositing with the Secretary of State is this: that the association is entitled to receive—I will have to be a little explanatory in my answer to your question. The association is expected to receive the installments of interest and payments upon principal, as long as the association is solvent and complies with its contract. That money is reinvested in mortgages, and then redeposited with a third party, so that in the ordinary operations of the business the amount of security deposited with a third party should always equal the total liability of the corporation. The loan that is paid out in monthly installments, and not repaid before maturity, naturally extinguishes itself, but the money derived from that loan, being reinvested in other securities, they have taken the place of this one security in another form.

Q. Does the law require that you should reinvest the payments on the contracts, as they come into your office? A. I do not think so; but the ordinary operations of the business compel us to do so, or else we would not be in business.

Q. What is to hinder the officers of the company, if they are so disposed, from converting the money paid in on these contracts to their own use, and thereby cause the security papers to become utterly worthless? A. The very thing that I suggested in my testimony of last evening, that no officer or director should be permitted to borrow money from an association. Then, if my suggestion of unexpected visits from

the Commissioners would be embodied in the law, the officers of the corporation would not dare, for fear of criminal prosecution, to attempt it. Further than that—I won't take up the question of the Commissioners just at present; I will take that up later. This question we have got to take into consideration always: if the officers are bonded, as they usually are, with other safeguards thrown around them, there is very little chance for any defalcation.

Q. Is it not a fact that stockholders and depositors in these companies, are they not just as safe with the securities in the hands of their officers as they are with the cash there that is paid in on those mortgages and securities? A. Absolutely not.

Q. Why so; why not? A. For this reason: the money in the hands of the officers never amounts to very much; the securities of building and loan associations amount sometimes to millions.

Q. If there is a law prohibiting the hypothecation of these securities, would not that be equivalent to depositing those securities in any—— A. (Interrupting.) It might take the place of it; yes, sir.

Q. It would be just as well, would it not? A. I don't think so, for this reason: I think that under the terms of deposit with the trust company, the securities should be deposited not in trust for any particular creditor or shareholder, but in trust for all. If they were so deposited, and the association borrowed money and became involved, the law should be so framed that no particular creditor could come in and levy upon these securities and sacrifice them; that they must be collected and liquidated and the proceeds paid to the creditors pro rata, if there was not enough to pay one hundred cents on the dollar, whereas, if the securities remained in the possession of the company perhaps a judgment creditor might come in and scoop the whole lot.

MR. HAHN: Do you think a law could be made which would prevent hypothecation of securities or disposing of them?

MR. ANDERSON: That is a question of law.

THE WITNESS: That is a question of law.

MR. HAHN: I know, but I didn't know whether you were experienced in that.

THE WITNESS: I don't know but what it is a question, because it might be an interference with the obligations of their contract.

MR. ANDERSON: I don't know but what a lawyer would be the best judge of that question.

MR. HAHN: The reason I asked, Senator, was you asked him the question if that might not take the place of the other; if, as a matter of fact, the Constitution prohibited such a proposed prohibition, then of course it could not take place, and I didn't know whether he knew or not.

MR. ANDERSON: I can't see the difference.

MR. WOODWARD: Are you through?

MR. ANDERSON: Yes, Mr. Chairman.

MR. WOODWARD: I glean from the method in which these questions were asked that your thought was that possibly if the securities were deposited with the State Treasurer or Secretary of State or some trust company, that payments on account not being properly credited and not being in their possession so they could be credited, they might be embezzled by some one in the office or the parties might become defaulters in office?

MR. ANDERSON: That is my view.

MR. WOODWARD: And therefore, the party paying would not get proper credit on the indebtedness. Is that the thought you want to bring out?

MR. ANDERSON: Yes, Mr. Chairman. I thought that the public might very easily be deceived by an advertisement of one of these companies saying that all its securities were deposited with the Secretary of State. I believe it would cause such a feeling of safety on behalf of the public that they would be more easily roped into a fraudulent concern.

MR. CURTIN: I don't think it is within human possibility to frame a law that will prevent the commission of crime; we can only provide a punishment for it.

MR. HAHN: That is all.

THE WITNESS: With regard to payments on the loans under the definite-contract system and under a law which would provide that a borrower was entitled to a credit upon his mortgage of the amount that he had paid in, less accrued interest and accrued expenses; a receipt by the corporation would be an offset against any demand upon the mortgage, especially where the mortgage was not in the hands of an innocent third party.

MR. WOODWARD: Being deposited as security?

THE WITNESS: As security for all.

MR. WOODWARD: Mr. Grange, I have been told by a gentleman in Sacramento that some years ago, in the failure of some local building and loan association, parties who had been making payments upon the stock or their indebtedness found that when that failure took place there had been no credits made upon the stock or actual note itself, and when they desired to get redress in the courts as an offset to the amount so paid that the courts held that inasmuch as the payments had not been indorsed upon the note itself, but simply entered in the memorandum book, was not entitled to any consideration whatsoever; in other words, the borrower was bound by the full value of the note as expressed upon its face. Could not that be provided for by having their pass-book—by having a memorandum notice put at the head of it something like this: "The payments in this book as credited to the respective accounts of dues, principal and interest are hereby acknowledged as being made as a partial payment upon the note numbered so and so"?

MR. GRANGE: Yes, sir.

Q. And then have the entry indorsed by the proper officer of the institution. Could not that be used as an offset in case a calamity of that kind occurred? A. Yes, I should think so. I would suggest in the case of the association you refer to they were not making definite-contract loans; the payments that were made by their borrowers were made upon stock, and that is the transaction I am objecting to. I submit for your consideration a form of pass-book along the lines of what you suggest.

[Witness hands paper to Chairman.]

MR. HAHN: Have you another sheet there?

MR. GRANGE: Plenty of them. I will give a sheet to each member of the committee.

[Witness hands sheet to each member of committee.]

MR. HAHN: Q. What is this perforation for? A. It is perforated because the theory is each coupon represents a payment and it is torn out to facilitate the entry.

Q. Then a book full of these coupons is handed to the borrower, and as he makes a payment you tear out one? A. Tear out the coupon, yes.

Q. And the stub is made to correspond with the coupon that you tore out? A. Yes, sir.

Q. And that is filled in; that is all the borrower has, this stub left in his book? A. Yes.

Q. Are these numbered consecutively? A. Yes. Now, I would like to take up the question of the powers of these associations to borrow money. The present laws, as I understand them, give the associations the power to borrow money *ad libitum*, as well as the power of hypothecation. According to my theory of conservative business there should be two restrictions placed upon institutions; first of all, should not be allowed to borrow any sum greater than their income for sixty days based upon their experience of the past sixty days; second, that they should not be permitted to borrow more than 10 per cent of their entire assets.

MR. CURTIN: Q. Upon what penalty for violation of that? A. The personal liability of the members, and if you please to extend the liability further by requiring the lender to acquaint himself with the conditions. Make it criminal if you like; any liability to stop the practice of these associations borrowing money beyond their ability to pay. Now, I would like to submit for your consideration an excerpt from the records of the Building and Loan Commissioners' office, showing the borrowing of one concern, whose name I will not mention, where you can see that they borrowed enormously as compared to their ability to pay out of their receipts. This statement that I am handing you covers the business of that particular association from 1895 down to 1903, and you will notice that the association in one year borrowed as much as \$275,800, which was 50 per cent of the total assets of the corporation. There will be other things that I desire to call your attention to in connection with that same association. [Hands statement to committee.]

MR. ANDERSON: This has the name on it.

MR. GRANGE: I am not putting it into the record.

MR. ANDERSON: I don't know as that cuts any figure. Everything that comes before this committee is to be published in connection with this investigation.

MR. GRANGE: This is a matter of public record, Senator Anderson.

MR. ANDERSON: If so, why so secret?

MR. GRANGE: Now, I think there should be a limitation on the borrowing power of building and loan associations. The next point that I desire to take up with the committee is the question of expense of the management. The ordinary local association of the interior towns is managed at a nominal expense.

MR. WOODWARD: Very nominal? A. Very nominal.

MR. CURTIN: Before passing from that; that matter you just referred to the committee being a matter of public record in the Building and Loan Commissioners' office—— A. (Interrupting.) Yes.

Q. And the Building and Loan Commission approved this statement? A. They have no power to object to it.

Q. I am asking you why there is no power to object to it? Is it because of the deficiency in the law? A. Yes.

Q. The Commission is placed in the position of having to accept that—— A. (Interrupting.) Or reject.

Q. Or, in other words, there is no other method of procedure?
A. Exactly.

Q. They are commission in name only, without power to prevent wrongs such as that indicates? A. Yes. Now, on the question of expense. There are two methods of handling expense of the associations: the deduction or the payment of expense from the earnings, or payment of expense by either direct assessment or contribution of the stockholders. The two plans are known, one as expense from earnings, the other as the expense-fund plan. The expense from earnings is the usual method adopted by the local associations of the State. The expense from earnings plan and the expense-fund plan are both in use by the general State companies. Some State companies use one plan, some another, and some use both plans. When the expenses are paid by assessment or by contribution of the member, the expense levy is limited to $1\frac{1}{2}$ per cent per annum of the par value of the stock, or in other words 10 cents per share per month.

MR. CURTIN: That would be arbitrarily fixed by the company itself?
A. Not only arbitrarily fixed by the companies themselves, but by the experience in the building and loan business of the United States. That 10 cents per share is handled by different companies in the State in a different way. There are two companies in the State that do not pretend to return any portion of that 10 cents per share to withdrawing stockholders. There are two companies in the State that have issued the expense-fund stock and expense from earnings stock that return full payments on expense from earnings stock, but do not return the 10 cents per share where the stock was an expense deducting stock. The other companies have a double limitation of expense, in this way: a share of stock going through to its maturity contributes 10 cents per share per month, or \$1.20 per annum. If the stock, however, is withdrawn before its maturity, the contribution exacted is limited to the carrying power of that certificate of stock; that is to say, any contribution that it may have made to the expenses of the institution is tentative, and it is refunded out of that expense fund before the payment of any expense. The commission that is required for that has been accurately ascertained after years of consideration, and will amount, in the older associations, perhaps to 35 or 40 per cent of the contribution. Now, as an illustration of the impossibility of determining the amount to be used or allowed to corporations doing business, I would like to submit to the committee some further excerpts from the records in the Building and Loan Commissioners' office. I desire, first, to submit the record of four different companies under the control of one secretary, and I desire to call the attention of the committee to the fact; this is a San Francisco local institution. You will find by making a computation of the figures—

MR. ANDERSON (interrupting): Name the companies. A. They are the companies controlled by Andrea Sbarboro, who claims to be the father of building and loan associations of the State of California, and he is the head and front of the fight against the State or National companies. The names of his companies are San Francisco and Oakland Mutual Loan Association, Italian-Swiss Mutual Loan Association, West Oakland Loan Association, and San Francisco Home Mutual Loan Association. Mr. Sbarboro's salary is on a very limited business, and decreasing business, commenced in 1895 at the sum of \$11,400 a

year, which did not include the other expenses of conducting the business.

MR. HAHN: What do you mean by that? A. I mean his personal salary.

MR. HAHN: That is what I am getting at.

MR. CURTIN: Q. Close to \$1,000 a month? A. Yes.

Q. As what? A. Secretary.

MR. HAHN: Q. As secretary of these associations? A. Yes.

MR. WOODWARD: Q. How much stock was in existence at that time? A. I have not computed in 1895, but I will do it in a minute. In 1903 his salary amounted to \$7,500 for the four companies, and a resumé of the figures for the last period will show——

MR. ANDERSON (interrupting): What are you trying to cover? A. I am trying to cover the cost. I am going to show other associations of a local character that do their business for less; the impossibility of the Legislature regulating the cost of handling these costs.

Q. You think it is impossible to do it? A. Yes.

Q. You think that statement made by our secretary last evening that it was advisable or possible to fix a maximum percentage as expenses of the companies——

MR. HAHN (interrupting): Did you understand it that way? A. I did not understand it that way.

MR. ANDERSON: Q. Did you make that statement? A. The question was whether it was advisable to make a maximum.

MR. ANDERSON: My recollection was, a paper seemed to take it down and I just noticed it this moment.

MR. HAHN: If the newspaper says so, it must be so.

MR. ANDERSON: He says in answer; he agreed that the maximum membership fee—no, I am mistaken about that.

MR. WOODWARD: Are you through, Senator Anderson?

MR. ANDERSON: You think, Mr. Grange, that it would be impracticable to fix a maximum?

MR. GRANGE: Yes; and I am offering this to you as an example of impracticability. In Mr. Sbarboro's four companies, according to the computation I have here, he collected for the four a little over \$21,000 interest; he made twenty-three loans, had three hundred and seventy-three stockholders, and received a salary of \$7,500, and I submit these figures to the committee. I will leave it with them.

[Witness hands paper.]

I would desire, also, to submit excerpts from the public records in the Building and Loan Commissioners' office of the Clark companies, which are much better managed. The Clark companies are known as the Commercial Building and Loan Association, Homestead Building and Loan Association, San Francisco Home Mutual Building and Loan Association; apparently I have got one of these mixed, because the same name appears on here that appears on one of the others; the Alameda Building and Loan Association. Now, you will find that Mr. Clark is receiving from these various associations a salary at present, in 1903, of \$6,995, and they are doing business at a cost of 55 cents per share for the secretary salaries, as against \$2 per share for Mr. Sbarboro's companies.

MR. ANDERSON: Do you draw the deduction from those figures that it is impossible or impracticable? A. Yes, sir.

Q. To limit their salaries? A. Because the limit of the range of the companies, of conducting these companies, is so wide that there is no such thing as striking a medium; location, character of business, character of the association management must regulate it.

MR. ANDERSON: Mr. Grange, is it not possible for a board of directors or officers of the company to vote themselves such an enormous salary, when the company is in a prosperous condition, that those salaries would bankrupt the companies in the course of five or ten years' time? A. There is a remedy for that.

Q. I say, is that not possible? A. Yes; there is a remedy for that.

Q. Well, I would like to hear it? A. Provide in your law that no officer or director except the secretary and manager shall receive any compensation except such attendance fees for meetings of the board of directors as the by-laws may prescribe.

MR. CURTIN: What do you then think of the provision of the law which guarantees the right to individuals as well as corporations, and corporations as well as individuals, to make a contract, and unless the contract interferes or contravenes with public policy— A. (Interrupting.) You are into constitutional questions, and I presume that would interfere.

Q. So you would suggest a remedy— A. (Interrupting.) I am suggesting a remedy that is on the statute books of other States.

Q. Other States may have different statutes. A. May have different statutes.

Q. We are coming right back to the old proposition that it would take a constitutional amendment to cure the evil. A. Yes, sir. I will leave all of these with the committee for their perusal.

[Witness hands papers to committee.]

MR. HAHN: Q. Did I understand you to state, in dollars and cents per share, the cost of conducting the four associations over which Mr. Sbarboro assumes the management? A. I said that, according to the figures as compiled in the year 1903, unless I have made some error of computation, his salary amounted to \$2 per share. The other expenses I have not taken into consideration.

MR. ANDERSON: \$2 per share per year? A. Yes.

MR. HAHN: Q. Did you compute the number of shares in force at the time? A. According to my reports, yes; that is how I worked out the business.

Q. Do you know what number of shares were in force in these four associations that he was receiving \$2 a share? A. I would like to correct the record, because I got hold of the wrong slip; the number of shares that were in force was 3,739 shares.

Q. Total? A. Yes.

Q. And he received \$2 per share salary? A. He received \$7,500 salary; it is about \$2 per share. Another point that I would like to suggest that should be remedied: associations should be forbidden from charging fines. I don't believe it just and equitable that any association should charge a member a penalty because that man is unable or unwilling to deposit his money with them. I can not conceive of any right or reason or justice in it.

MR. WOODWARD: Q. Will you kindly make that statement again? A. I say that the law ought to prohibit associations from charging fines, because I can not conceive of any equity, right, or justice in any cor-

poration penalizing a man because he is unable or fails to deposit his money with them. If you are going to give the individual the right to withdraw his money, you should also allow him to exercise the option of stopping his payments when he gets good and ready. The only penalty that should be assessed is the obvious penalty, and that is, inability to participate in the profits of the institution for the money that he has not deposited.

MR. ANDERSON: I agree with you there.

THE WITNESS: Now, another thought: I believe it is conceded that in the evolution of time our building and loan associations have ceased to be what they originally were: little local concerns managed by a number of men who came together as partners, who all became interested in the affairs of the corporation, who all had a voice in the management of the corporation, but these became practical savings banks in a sense. They are no longer philanthropical institutions. They are money-making institutions, without any philanthropy. They ought not to be allowed to start business on a shoe-string. The gentlemen in this room could join together to-day, sign articles of incorporation, subscribe to one or ten shares, or any amount of stock they pleased, make their payment of 50 cents per share, have an aggregate capital of \$50 to start in with, and then go out into the world and say we are an association, and start deposits. I believe that is all wrong. I believe that no building and loan association should be permitted to start business without a paid-in capital, in cities of the first class, of less than \$100,000, and that capital should be non-withdrawable, but stand as a guaranty for the performance of the contracts of the association and be liable for all losses that are incurred or accrued.

MR. ANDERSON: Q. Cities of the first class, \$100,000? A. \$100,000, and you might reduce it in the same proportion that the savings banks' laws reduce the proportion of the capital in the cities of the second and third class, and so on in the State. I think there is no more reason and no more justice for a building and loan association to start out on a shoe-string than there is for a bank. The policy of the State of California with regard to banks has been to do away with mutual banks that can start without a capital, and I think the same thing should apply to building and loan associations. Last night Assembly Bill No. 454 was brought up. That is the little bill that provides for withdrawal, upon thirty days' notice, of the amount paid in.

MR. ANDERSON: Q. Is that Waste's or Drew's? A. Drew's. I consider that bill a dangerous bill.

Q. Is that the same proposition?

[Handing paper to witness.]

A. This is not the same proposition, but it is the same proposition as I remember it, that a provision for a deduction of \$1 per share entrance fee is made. If this bill is adopted, there will be no building and loan associations in the State of California.

MR. CURTIN: Q. Don't you think that would be a good law, then? A. If you wish to do away with building and loan associations, pass the bill.

MR. CURTIN: I think I will pass on.

MR. ANDERSON: Q. What point did you refer to? A. I refer to this: unless the entire law governing building and loan associations is amended; that that law goes upon the statutes simply as amendatory

to the present law, a little local association in the country can not start, because the little local associations are insolvent on the start and can not comply with the provisions of that Act.

Q. Ought not the building and loan law be amended so that this would be appropriate? A. I don't believe, unless the association had a capital to fall back upon, that it would be possible for them to survive under that law. I mean a new association.

Q. As to what point, Mr. Grange? A. As to the liability. You require the association to pay all that is paid in on the start; you don't provide for losses; you don't provide for expenses; you say that the fellow who happens to come in first with his withdrawal shall get his money, and the fellow that comes in later with his withdrawal must bear the burden of all the losses and all the expenses that may have accrued.

MR. CURTIN: Q. Where does that difference lie; what allows the first man to draw out and the second man to pay up? A. Suppose, now, that we have an association that is a going company; they meet with a loss; some of the members take advantage of that bill, file a notice of withdrawal and draw out their money, which they have an undoubted right to do—would have under that bill: the association would be compelled, so long as they had money, to pay the full amount paid in, whereas if they met with reverses, either from losses or extra expense, it would render them insolvent in a very short time, perhaps at once, and gives the man who comes first with his withdrawal application a prior right to any of the funds.

MR. ANDERSON: Mr. Grange, is it not a very dangerous concern that could not at any time, on giving a proper notice and proper time within which to act, pay one hundred cents on the dollar? A. I will grant it. Yes; but you are attempting now to deal with a mutual corporation. If you vote aye for that bill you are attempting to say that, though this corporation is a mutual corporation, the stockholder who has made a demand for money in advance of his fellow stockholders shall have the preference.

Q. He might have the preference in the time of payment, but not in the amount? A. Then I have misread the bill. With your permission, may I read it: "A stockholder, member or investor desiring to withdraw from any association or to surrender a part or all of his stock or investment certificate, shall have the power to do so after one year by giving thirty days' notice in writing of such desire. On the expiration of such notice, he shall be entitled to receive the full amount paid by him to the association, less entrance fee, if any, which shall not exceed one dollar (\$1.00) per share on any stock or investment certificate issued after the passage of this Act, with such proportion of the earnings thereon as the by-laws may provide, or as may have been fixed by the board of directors." If you amend that bill and say "less his proportion of ascertained loss," then there is no objection to your bill except the one on constitutional provision that you run up against; and that is fixed at a dollar a share or any other amount as entrance fee or withdrawal fee.

MR. ANDERSON: In connection with a banking institution—and I hope that the building and loan associations are on as safe a foundation as banking institutions—there is no provision for receiving less amount than you deposit? A. Quite true.

Q. Why? A. Because a bank is required to have a guaranteed capital.

Q. You just say why—— A. (Interrupting.) But that is not a part of the law.

Q. We are going to make it so, if we deem it advisable. A. If you make it so, then I have nothing to kick about this bill; but I say if your bill is incorporated in the law as it now stands it is a dangerous bill.

Q. I asked you the question, "Could you so amend the law as to make that bill practicable," and you said you did not think you could? A. I don't think I understood the question. If you put in a guaranteed capital requirement—not an option, but a requirement—in this Act, then it is all right except the one provision which I claim is unconstitutional, the fixing of any fee.

MR. HAHN: Q. You mean a maximum fee? A. I mean any maximum or minimum fee, because the law of 1891 provides for a fee of 10 cents per share. The Provident Mutual Building and Loan Association of Los Angeles charges \$2, and don't make any secret or bones about it. A stockholder objected; the case was carried to the Supreme Court of this State, and the company sustained in the deal. What are you going to do about it?

MR. ANDERSON: Q. Mr. Grange, let me ask you this question: What losses can a building and loan association sustain? A. The depreciation of securities. I will cite, for instance, the town that our friend, Senator Hahn, comes from. In 1887 property was booming in Pasadena; loans were made in large amounts on the basis of 50 cents on the dollar. In 1889 and 1890 a great deal of property in Pasadena had fallen to about 15 or 16 per cent of its value in 1887.

Q. Improved property? A. Improved and unimproved property.

Q. Do you loan on unimproved property? A. No, no; by the way, that should be forbidden, too.

Q. That is the point I want to get at. I don't see how the property could depreciate in value 50 or 60 per cent—improved property—and that is the only property that building and loan associations were intended to cover. A. In 1893 I have known the real estate to depreciate 80 per cent—improved property.

MR. CURTIN: Q. Eighty per cent? A. Eighty per cent in some States.

Q. In this State? No; in other States. I did happen to be in this State in 1893. I cited Pasadena, because I happened to know about Pasadena, and Senator Hahn was from there, and I thought he could verify my statement.

MR. HAHN: That is true.

MR. ANDERSON: Do you mean that improved property depreciated 50 per cent in value?

MR. HAHN: Yes.

MR. ANDERSON: Improved property?

MR. HAHN: Yes, 50 and 60 per cent.

MR. ANDERSON: Q. Let us get that note. You advise us that no building and loan association should loan on anything but improved property? A. Nothing but improved property. They should be forbidden from loaning money on certain classes of improved property, which I will name to you. The classes of improved property that these associations should not be permitted to loan on are as follows: Churches, livery barns, blacksmith shops, manufacturing enterprises of any kind,

theaters, and hotels. They should confine their loans to residence property and inside business property.

MR. HAHN: That is good.

THE WITNESS: They should only loan on unimproved property for the purpose of erecting buildings. They should not be permitted to loan on orchards, either lemon or any other kind; they should confine themselves to the two classes of loans for the maximum safety of institutions.

MR. HAHN: Q. Would not loan any on cattle? A. No, sir.

MR. CURTIN: That lets me out, then.

THE WITNESS: Now, one of the greatest sources of danger to building and loan associations is a point that has not been touched upon yet and which I left for my conclusion. It is a practice in this State, I am sorry to say, to inflate the value of property in applications for loans; to inflate them first to fool the officers of the association, and second, to fool the Building and Loan Commissioners. It is done. I must ask to be excused from stating the names of the corporations that do that, but I know of corporations in this State that suggest to the borrowers, if the borrower says the property is worth \$1,000, to put it in for \$1,500, because they want to make a good showing when the Commissioner comes around. Now, I know that is done; that is not hearsay, it is actual knowledge.

MR. CURTIN: Q. Based upon your experience? A. Based upon this: that people have come to me and made application for a loan, and I have rejected the application for the loan because of a false statement of values, and they come back and they say, "If we make an application to this society or that other society, we have got to add to the value to get our money." I contend that there should be a provision in the building and loan laws of this State making it a felony for any borrower to state in his application, knowingly, a false valuation as to his property—a false description as to improvements; compel borrowers under a penalty of felony—

MR. HAHN (interrupting): Excuse me, right there. You say he ought to be placed in a position so that if he made a misstatement as to the value of his property— A. (Interrupting.) So that he could be prosecuted.

Q. Is it not a fact that the question of value is one largely of opinion, and it would be almost impossible to prosecute any one? A. He would not have to lie about the cost of it.

Q. The cost of it, that is a different thing: if you make him put down the cost, that is one thing. A. He does not have to lie as to the cost of the building he proposes to erect according to the contract he has made; he does not have to lie about the character of the building he is going to put up; send in a specification of a fine building he is going to put up and then put up a shack. There is no law to reach those people.

Q. I agree with you there; that is something that should be put in there. A. Now, that is done, and the association loses money by reason of it. You heard the other night when one man said that he could not sell his property for \$600, and he borrowed \$1,800 on it. Unless there had been a false statement and collusion between the borrower and the agent, such a transaction would not have been possible. I believe, gentlemen, I have covered the subject.

MR. CURTIN: Q. Mr. Grange, I have a suggestion which I want to make, but which I hope you will take in good part: You are a member

of a building and loan association which is evidently making a success under the existing laws? A. Yes.

Q. You have come here before this committee and pointed out a world of defects and imperfections in the present law? A. Yes.

Q. And have suggested a great many remedies; if all of those were to be put into effect, what effect would it have on existing corporations and building and loan associations? A. Benefit them.

MR. LYNCH: Q. What effect would it have on investors? A. Protection; if I might be permitted to say in regard to my corporation; I won't do it unless I am permitted to refer to it.

MR. CURTIN: I would not care to have you. I was thinking of something that I heard once in a jocular way that I think might apply, and that is, "Beware of the false gods that bring ye green goods in a basket." I was afraid, if we put in all these reformatations, that there might be something upset. A. I don't believe it would injure any association in the State.

Q. Nor would you destroy the confidence of the public? A. The investor and the borrower would be protected, and because I believe so I have come here before you to suggest these changes. I have fought legislation in three successive Legislatures of this State. My ideas on legislation have never been different.

Q. You never change? A. I have never been different as to the necessity.

Q. Were the lines of legislation you were opposing different from that you are now proposing? A. The lines of legislation?

Q. That you were opposing; are they the same that you would incorporate in the laws, or were you successful? A. I have opposed legislation heretofore because it was not in the line of safety.

Q. Did that legislation carry? A. None of it.

Q. None of it? A. No, sir; and I will say this without, I think, any fear of contradiction, that all the work I have done in the Legislature of this State has been done before committees. I have no recollection, until perhaps this session, when I have spoken to members of this committee and members of the committee in the Assembly. I have no recollection, in previous Legislatures, of even discussing the question personally with any member of either house, but I have fought the thing before committees, and the legislation did not carry.

MR. ANDERSON: I would like, Mr. Grange, to ask a few brief questions before you leave us. There is a bill proposed here by Senator Shortridge, and I believe it is in keeping with the present law as far as that is concerned, providing for two Commissioners and a secretary. Would not one Commissioner, in your opinion, be sufficient in this State, and a competent secretary? A. If the Commission will do what I consider their duty, three Commissioners would have all the work they could possibly attend to.

Q. You advocate two examinations a year? A. I advocate this, sir; I advocate that the salaries of the Commissioners and their secretary be increased. I have to pay a large proportion of the expenses of that Commission, representing one of the large institutions; I think the salary of the Commissioners should be placed at at least \$3,600 a year, and that the salary of the secretary should be placed at \$2,400 a year; that those Commissioners be required to give their whole time and not engage in any other business excepting the duties of the Commission,

and unless they could make an affidavit whenever they came to draw their pay that their whole time has been given to the work of the Commission, they should not be entitled to any pay.

MR. CURTIN: Q. What is the salary now? A. \$2,400 and \$1,200. I think, further, that the allowance for traveling expenses should be increased; it is not sufficient. I think, further, that instead of charging associations a fee for examination into their assets, if the mortgage is six months in arrears or if they own any real estate that a fund should be created by assessment upon the companies in the regular way so that the Commissioners of their own motion could make a secret investigation, without expense to any particular association, of any of the loans or other securities that the associations might have. For example, there are a number of associations in Los Angeles and San Francisco that are making loans, we will say, in the town of Fresno, it being a medium place. The Commissioners could take a list of all these loans, and when they were in Fresno and were not occupied by examinations they could take a horse and buggy and drive around and look at the properties. No particular association will bear any portion of that expense. It is not going to hurt a conservative association, but it would enable the Commissioners to keep track, in a way that they can not do now, of the securities of the institutions.

MR. ANDERSON: Q. Then you would not approve, Mr. Grange, of the secretary giving his services to any of these building and loan concerns and receiving compensation for those services? A. Not if you paid him an equitable salary; but if you pay him a measly salary of \$1,200 a year, as he is now receiving, I think he is justified in doing so.

MR. CURTIN: Q. How can one man serve two masters? A. Well, one man can not very well serve two masters.

Q. That is what I think; he should either be secretary of one or the other. A. You have got to pay a man a living salary.

Q. I agree with you there. A. I can not get a man as competent as Secretary Fields is, because I consider him one of the most competent building and loan accountants in this State, and I would be glad if Mr. Fields would resign from the Building and Loan Commission and come into my employ at a very much higher salary than he is now getting.

Q. What keeps him from doing it? A. That is his business. I don't know. He would probably have to work harder.

Q. May be you would work the man to death? A. Pay him a decent salary; pay your Commissioners a higher salary, and then do not allow them to engage in any other business.

MR. WOODWARD: Q. I understand, Mr. Grange, that all of these theories or suggestions you have made should be enacted in a common law, and then it would require two Commissioners and a competent secretary? A. Two Commissioners and a competent secretary. There should be one man at work in the office and two men out at work.

Q. But if the law remains as it is now? A. Then I don't believe if you had fifty Commissioners it would do you any good.

Q. Why wouldn't it do any good? A. I don't think so, because they have got no power to remedy existing evils.

MR. ANDERSON: Q. The original object of instituting building and loan companies was to aid men of ordinary means in securing homes, was it not? A. Yes, and to provide a savings fund. Do you want a little history of that? I can give it to you in a few words.

Q. Very well; I thank you for it. A. The first idea of building and loan associations came from the Chinese, from the Wowie Society. The idea was then taken up in Hamburg in 1794, and the association was known as the People's Bank. It was then taken up in Great Britain in 1812 by the Earl of Selkirk. The building and loan business that was first started was unsuccessful. In England has grown the Burbank Bank or Building and Loan Association, which is one of the largest financial institutions in the world, and their business is being conducted partly along the lines I have been discussing. They will tell you it is not a building and loan association, but that it is a great big financial institution, and so big that the Bank of England—during the flurry in England the Bank of England loaned it five million pounds sterling to take care of a run. In 1840 this association started in Philadelphia. They were limited in number of shares and only had one series. Every man had to be a borrower, otherwise they could not run out. When the borrower was no longer demanding money on shares, the free shareholders were required to borrow on their stock, compelled to. They were succeeded by associations. They first commenced to keep separate sets of books of their series, and that was found cumbersome. Then accounts were kept for building and loan associations under serial plans in one set of books and the money interchangeable. During the eighties the first national association was started in Minneapolis, Minnesota, and had a very successful run. Under the old national system a member never got out anything like what he put in. They never proposed that he should get it out.

MR. CURTIN: Q. Have they changed since then? A. They have changed.

MR. HAHN: Q. Did you mean that? A. In this State ten years ago an investor in a national association would remain a great many years before he could pull out even. A borrower always got the worst of it. Competition, change of conditions, and evolution have changed the character of business in this State until to-day it is gradually drifting nearer to the savings bank proposition. If you will enact good laws, competition will force them to do business nearly like savings banks, and that is what it has got to come to.

MR. CURTIN: Q. And if we carry into effect a great many of the suggestions you have made, which seem reasonable, it would put a great many of them out of business? A. I don't think so.

Q. They would have to adjust themselves to the new conditions? A. They would have to adjust themselves to the new conditions.

Q. It would benefit some, but work hardship on others? A. I don't believe it would work hardship on any company in the State.

Q. You don't think that their business is such that it would be greatly affected by this proposition? A. I do not.

Q. And you think it would bring some proper results; that is, it would check some of the abuses that seem to exist? A. I think that if the law was enacted the history to be made within the next two years, before the next session of the Legislature, would bear out the correctness of my assertions.

MR. ANDERSON: Q. You have what is called the prepaid stock, paid-up stock and guaranteed stock, have you not? A. Yes; and deposit stock and full-paid stock. Are you speaking about my company?

Q. All like companies. A. All like companies; yes.

Q. The custom of these associations has drifted from their original intention into the present condition, providing for these different kinds of stock? A. Yes.

Q. Which you call your capital on which you work? A. Yes.

Q. And that is the reason why you say they are drifting toward the conditions of savings banks? A. Yes.

Q. And that is the reason why you recommend that they should have a capital stock like savings banks? A. Yes. And further, experience has shown—for instance, in Canada, where this process of evolution has been going on more rapidly than in this country. There are very few associations in Canada to-day—in fact, I don't know of any that do not have a capital.

Q. Then, wherein would they differ from our ordinary savings banks, and what would be the necessity of having two distinct organizations?

A. Because the profits of the association would be divided entirely among a set of shareholders instead of between a capital stock and a set of depositors; because in the savings banks—we will take a savings bank in San Francisco, for instance; I could name a couple of them that are paying 30 or 40 per cent dividends on their stock and paying their depositors 3 per cent; that custom will not prevail in building and loan associations.

Q. When a building and loan association should grow into that condition, why would not it be necessary to provide for an admission fee or for a withdrawal fee? A. Because in order to keep up your clientage you must get your business by solicitation, or else you have got to pay the cost of getting the business, or else you have got to do away with your high rate of participation in the profits and simply do a deposit business that comes to your doors.

Q. Suppose that we agree with you that an admission fee is necessary for the purpose of soliciting business, then can we not do away with the withdrawal fee? A. They are synonymous. They are no different.

Q. The admission fee, as I understand, with a great many of these companies is only \$1; am I right? A. Yes.

Q. And the withdrawal fee where there is no admission fee, and where there is a withdrawal fee? A. Yes.

Q. Usually \$2? A. Yes.

Q. Why should one set of companies be able to do its business on \$1 where others require \$2? A. For the reason that I explained in the earlier portion of the evening. The company that charges \$1 fees pays that dollar to the agent soliciting the stock. The balance of the cost of obtaining the business is paid out of the profits. The company that charges \$2 for withdrawal or membership fee pays all of the cost of obtaining business out of the membership or withdrawal fee, and a great portion of the balance of the expense. It is a difference of method of paying expenses. The expenses have got to be paid, and it is only a question as to who shall pay them.

MR. CURTIN: Q. It does not make any difference whether you take it out of the entrance fee—— A. (Interrupting.) Or whether you take it out of the profits.

Q. All of that has got to be paid out in some way? A. Yes; it all has to be taken out in some way. The expenses have to be paid.

MR. ANDERSON: Mr. Grange, can I ask you another question? A. With pleasure.

Q. All right; I don't know the comprehensive name of these get-rich-quick, is that it? A. Get-rich-quick concerns.

Q. Do you know what is meant by that term? A. Concerns that issue contracts.

Q. I ask you if you know what the popular meaning of that term is? A. Yes.

Q. Do you think it is practicable to put these concerns under some State commission? A. I think the only practicable way to reach them is to put them under a State commission that has power to stop their operations, if fraudulent or if dangerous to the public, and to require all corporations seeking investments from the public to have a satisfactory capital.

MR. HAHN: I will state, Senator Anderson, that there is now before the Senate a bank bill amending the Bank Commission law.

MR. ANDERSON: Covering all of those concerns?

MR. GRANGE: I think it is 703. Mr. Olmsted's bill in the Assembly.

MR. HAHN: We have it also in the Senate.

TESTIMONY OF C. J. WADE.

Sworn.

MR. WADE: Shall I, Mr. Chairman, make a statement?

MR. WOODWARD: Yes.

MR. WADE: Mr. Chairman, I have listened with a great deal of interest to the discussion that has been had to-night and last night in the room, and a great many of the things that have been said by Mr. Grange have met with my sincere approval, and I think they are good; but in the whole discussion there has been a neglect of the interests of the purely local associations. There has been a great deal of talk about the large associations, about what they are doing and what they are not doing, but very little has been said about the local associations. As I am informed, there are about one hundred and thirty more or less local associations in this State, and of that number ten are running as "nationals" and the others as "locals." These local associations have among themselves formed a league and the association that I am connected with, and I am a member of the league, and I am authorized to speak by the president and managing director. I have leave of that league and am authorized to speak before your committee to-night authoritatively as representing that.

MR. ANDERSON: I happened to see that telegram, by which he is given authority. Will you show that to the Chairman?

[Witness shows telegram to the Chairman.]

THE WITNESS: Therefore, I want to speak to-night particularly on behalf of the local associations and on behalf of the building and loan business as a whole, and to call your attention, if I can, to the causes that have created dissatisfaction among not only the borrowers but also the investors in building and loan associations. Thirty or forty associations have been doing business in this State and have been doing the very thing that Mr. Grange tells us can not be done, namely, to return to the withdrawing member all of his money with a reasonable proportion of the earnings.

MR. ANDERSON: Q. At any time? A. At any time. The dissatisfaction in building and loan matters was stated by Mr. Grange last night to result solely from the dissatisfaction on the part of borrowers who paid off their loans before maturity on their contracts. Now, I have had fourteen years' experience in building and loan business myself.

MR. HAHN: I did not understand you. A. I said that last night Mr. Grange made a statement that dissatisfaction in building and loan associations arose solely from the dissatisfaction of the party who borrows. Is that the way I understand it?

MR. HAHN: I didn't so understand. A. Who wanted to borrow upon their loans before maturity.

MR. HAHN: I didn't understand him to say that. I understood him to say largely.

THE WITNESS: I understood Mr. Grange to say solely.

MR. GRANGE: I don't think I said so.

THE WITNESS: I would like to have the record of that. I think you did; however, I think that is a matter of dissatisfaction, and I am inclined to think more has been caused by members joining an association and wishing to withdraw from the association at the end of four or five or even six years and not being able to get back as much money as they put in—

MR. CURTIN (interrupting): Mr. Grange said the trouble was solely on account of stock transactions and not borrowers, fines, and penalties.

THE WITNESS: Well, I do not have any wish to misrepresent Mr. Grange, but I understood him to say the dissatisfaction was solely on the part of the borrowers; perhaps I am wrong.

MR. ANDERSON: That is a little different.

MR. CURTIN: Go on.

MR. HAHN: In my mind it is immaterial.

THE WITNESS: I will concede the point that you can not build up a business, except on a very small scale, without some admission fee; some entrance fee to pay the initial expenses; but I do not concede the point by any means that it is necessary to make that admission fee \$2 per share.

Q. Why not? A. Because several large associations have built up a prosperous business upon a dollar per share admission fee. Now, Mr. Grange made the point that the dollar went to the agent and left nothing to the association or other incidental expenses. Now, I dispute that, because there is always a certain amount of stock coming into the association over its counter. No agent is entitled to the admission fee on that, and I claim from experience that a dollar per share will not only pay the agent, but will also pay the other expenses—putting the business on your books.

MR. CURTIN: Q. That dollar that comes in, as you say, over the counter, goes into a fund and not to the individual behind the counter? A. It can not go to the individual behind the counter. Of course, if there is an individual behind the counter who has a contract which entitles him to that dollar, that is another matter.

Q. Suppose that the secretary is doing the business and the person comes in and wants to buy the stock, his salary alone ought to compensate him? A. Certainly; and that dollar ought to go into the treasury and be accounted for the same as any other dollar.

Q. And the dollar that the agent gets is the agent in the field? A. In the field.

Q. So that the dollar per share is not a payment to the agent alone? A. No, sir; whatever comes over the counter goes into the expense fund, and every one pays it. Now, then, with the bill that has been prepared by the league of local associations—with the passage of that bill—

MR. ANDERSON (interrupting): What bill is that? A. Assembly Bill No. 75—Waste's bill. Will in my opinion cure—I should say in connection with the bill introduced by the Building and Loan Commissioners, introduced by Senator Shortridge, No. 295, be sufficient to cure any evils that now exist in the building and loan business.

MR. CURTIN: Let me call your attention to the Waste bill, commencing on line 36: "Any such corporation shall have power, by its by-laws, to impose and collect a fine from each stockholder, not exceeding ten per cent of the defaulted amount, for every neglect or refusal to make his payments of dues or premium or interest, when due, and to impose and collect a like fine successively on every regular pay day during such default." Do you favor that? A. I favor a fine on loans, and also favor a fine on serial associations. In the association I am in we charge no fine to members, but that cuts no figure.

Q. You favor it upon borrowers, that is to say, each stockholder? A. That bill has not been through the committee yet. The committee took it up this evening. There are some amendments; there are amendments suggested, and I should have said that. There are amendments that have been presented to the committee, and their consideration has been postponed until to-morrow.

Q. Does the amendment cure this evil in here; that one about the fine of the stockholders that I just read? A. I don't know whether it does or not.

Q. I wanted to get your opinion on that subject? A. I want to call your attention to something about that fine business which you do not understand.

Q. Do you agree with Mr. Grange's statement that there should be no fine upon stockholders? A. No, sir.

Q. All right; that is all I want to know. A. Where our earnings are divided among members on the serial plan and no individual account is kept with each member, every member in the same series gets the same earnings. If he has not paid in the same amount of money he is getting more earnings than he is entitled to, which is equalized or attempted to be equalized by imposing that fine.

Q. How about the borrower? A. Now, in regard to the borrower, universal experience of building and loan associations in the last forty or fifty years in the United States has been that a fine—a maturity fine—is necessary in order to keep the borrower up to prompt payments on his loan. If there was not a penalty as provided—you know a great many are careless about things.

Q. He is paying interest on interest, is he not, if he fails to make his payment at the time specified? That is, the interest is compounded on him monthly; is it not? A. I have never known of that having been done.

Q. I mean where he fails to make his payment? A. I have never known of any compound interest being collected; it may be different in

some associations. I have always known of the practice of charging fines in lieu of compound interest, and I say it is a common practice all over the United States.

Q. How much does your association charge for a fine in the way of fine for failure to make payment when due? A. From a borrower?

Q. Yes. A. Ten cents per month, per hundred dollars of the loan.

Q. That would be 10 per cent per month? A. It would not be quite 10 per cent. On a hundred dollar loan it would be \$1.30; it would be 13 cents. The imposition of 10 cents a month is not scientific. It is simply——

Q. (Interrupting.) It would amount to 120 per cent per annum. A. No, sir.

Q. What would it amount to? A. The annual dues are \$150. The fine for the whole year delinquency would be \$12, which is about 8 per cent per annum. The one month delinquency is much more severe.

Q. Then if he did not pay the next month? A. It is less severe and less severe.

Q. Don't you add the same amount for each month? A. No, sir; we don't accumulate fines; not by any means.

Q. If he fails to pay the first month; we will say, for example, that the fine on \$5 a share would be 50 cents? A. One month on \$10 would be \$1.

Q. Suppose it is \$5 for the first month? A. Yes.

Q. What would it be the second month? A. \$5 more.

Q. You don't charge him for failing to pay the second month? A. No, sir. Yes, sir; we do, but we don't charge him again on failing to pay the first month.

Q. For instance, if he fails to pay the January dues and February comes around and he fails to pay February dues? A. Yes.

Q. And March comes around and he fails to pay March dues? A. Yes.

Q. At the end of March, how much of a fine would he have to pay? A. \$15 on a \$5,000 loan.

MR. WOODWARD: I would like to interject a question right there. I am impressed with the conversation between the two gentlemen who are building and loan men; one may have more knowledge than the other. I am not prepared to say as to that; you apparently have a misunderstanding as to each other's association—— A. (Interrupting.) No; I understand it, Senator, and I hope he understands me.

Q. This is what I want to say: Isn't it a fact that the way the building and loan business is carried on at this time that there is a sort of maze of intricacies about it that does not become familiar to the average man who is an investor or stockholder? In other words, to put it this way: Every stockholder, for instance, that invests in your company, would you sit down and give him the time and explain to him these bewildering intricacies that are necessarily in the building and loan business and inform him thoroughly as to what he might expect in his business relations with you such as you are giving to the committee? Now, would you be willing to do that? There is a French scientist who says that "sixty per cent of words spoken are misunderstood." Now, you understand how a man gets bewildered.

MR. CURTIN: If a man heard Mr. Grange, then heard this gentleman, he would be like the justice of the peace who, when he heard the plain-

tiff's side of the case, said I am thoroughly convinced, and after hearing the other side said I am thoroughly confused.

THE WITNESS: This is a very simple proposition.

MR. ANDERSON: I would like an answer to the Chairman's question.

MR. WOODWARD: It is not, perhaps, an intricate question to a person who understands it, but take the average farmer or the average laborer, who does not know anything about it, and some one of your agents came to him and solicits business and wants this man to become an investor——

THE WITNESS (interrupting): Mr. Chairman, there are a great many intricate propositions in the building and loan business, but the real thing is this—the real proposition of local associations is this: A man pays in 50 cents a month on a \$100 share, or \$1 a month on a \$200 share; at the end of a year the profits are divided among the stockholders, borrowers and investors alike. He has a pass-book. In that pass-book the secretary enters in the dues column the amount of money that he pays in every month; at the end of each year or at the end of every six months he places in a column the amount of that man's participation in the earnings, or his dividends as we call it; these two amounts constitute his book value; that is what is called his worth; that is reducing it to your simplest terms. That is what most local associations do. Now, the borrower——

MR. WOODWARD (interrupting): May I ask you a question there? A. Yes.

Q. You were here this evening and heard a suggestion I made to Mr. Grange: Would it not be better for the investor and the man who is in there rather than to figure out the book value—there are lots of men who do not know how to figure in the world—simply to have printed on his certificate that he may have, or on his tag, that on the 23d of the month the withdrawal value is so much? A. It is absolutely impossible to do that in a strictly mutual corporation. Now, if your savings banks loaned out money at 6 or 7 or 8 per cent and had agreed to pay a depositor 4 per cent and no more, you can tell your depositor what his deposit will be worth at a given time; but the very essence of building and loan associations is that it is an association of borrowers and moneys bonded together in a mutual corporation to share fully in the earnings of the corporation. That being the case, the book value of an investor's stock, the borrower's stock for that matter, would depend to a certain extent on the earnings made. You can say to that borrower and you can print on that stock you can withdraw so much, that is, the amount paid in, with such a percentage, if you please, of the dividends declared, but you can not put in a fixed withdrawal value on a purely mutual basis, because the withdrawal earnings of the association are an element in the calculation, and you can not tell what they are. I have a few suggestions that I would like to take up one at a time; it will only take me about five minutes, and I believe if they were embodied in these bills, if they are not already in, would cure practically all of the trouble in the building and loan business. In the first place I would recommend that there should be no admission fee over \$1 per share and no withdrawal fee or any other fee of any kind; that there should be no expense for the deductions; that is where a great deal of this trouble comes from; that the expense should be taken out of the earnings under that, and

that a new dividend should be declared. That all loans should be made——

MR. CURTIN: Can I interrupt here? A. Yes.

Q. How would you declare a net dividend on the statement made by you a few moments ago: that you can not anticipate a withdrawal fee, inasmuch as they are all mutual and the whole transaction is based on earnings? A. You don't declare a dividend until you ascertain your earnings at the end of the year, and even that dividend is declared in the building and loan associations as distinguished from the savings banks; a savings bank gives the depositor 3 per cent and the balance then goes to the stockholders; under the mutual loan plan the depositors are stockholders and it is distributed to them.

Q. If the by-laws declared a certain net per cent—— A. (Interrupting.) The net earnings are the gross earnings less your profits and losses that would necessarily all have to be paid, because if a man wants to withdraw in less than a year, don't give him any earnings; if he withdraws after a year, give him a percentage of his earnings.

Q. I understood you to say that you would make a net profit to be declared each year? A. Yes; whatever it was; whatever it might be.

Q. That would be on the net earnings? A. Yes.

Q. Would you think it advisable to set apart anything of that for reserve? A. Yes.

Q. They don't do it now? A. Many of them do.

Q. Not all? A. Not all; but I think that all loans should be made to members only.

Q. You think that all loans should be made to members only? A. To members only; otherwise you destroy the mutuality of the proposition.

MR. CURTIN: Q. Don't you have borrowers and investors? A. Yes; and they are members alike.

Q. Why can't a man be a borrower without being an investor? A. Because he comes in and participates with you in the profits of the business and thereby gets his interest; other things being equal, of course, you can make a rate to him; but it would be a lower rate than if he did not participate in your earnings.

Q. I think I asked Mr. Grange if you were to segregate them so that they were to be a borrower who was not a stockholder and not to permit investors to participate in the profits—— A. (Interrupting.) That would be a radical departure from what has been the custom. I differ from Mr. Grange radically on that, and I think Mr. Fields differs from him.

MR. CURTIN: I think Mr. Fields went so far as to say it might not be done under the existing law, but I did not understand Mr. Fields that it could not be departed from.

MR. FIELDS: I don't know what I said in regard to that, but I believe that every borrower should be a member.

THE CHAIRMAN: May I ask if the so-called "local" building and loan associations loan to people who are not members?

MR. FIELDS: I never heard of that.

Q. Why do you say that no man should borrow unless he is a member? Why should it be necessary to say that? A. Because it has been advocated that they should loan to those who were not members.

MR. CURTIN: Proceed, Mr. Wade. Pardon the interruption.

MR. WADE: A. Certainly; that is what I am here for. I think such

loan must be on the definite-contract plan, providing for a definite, fixed number of payments, of a definite, fixed amount, and at a definite, fixed rate of interest, to be stated in so much per cent per annum or per month, or at a stated amount of monthly interest on each \$100 loan in addition to the monthly payments of dues required on the stock; that there should be no premiums; that no premium of whatever nature should be charged.

Q. Then, in other words, suppose that a man wanted to borrow \$1,000, he would have to take, at least under the present law, one share of stock? A. At least one share of stock.

Q. Suppose the company should say to him, you can not borrow that \$1,000 unless you buy one hundred shares of stock. Would that be out of the way? A. That would depend on the value of the stock.

Q. That would depend on the value of the stock? A. Yes, sir. And of course it would also depend on the by-laws.

Q. He would not be required to take more stock than the value of the loan? A. No, sir. The usual rule, and in fact the law at present, as I understand it, is that the borrower shall take not less than one share at the par value of \$100 for each \$100 borrowed.

Q. That is, to equal the amount borrowed? A. Yes, sir.

Q. In order to borrow \$1,000 he has got to pay the interest on \$1,000? A. Yes, sir.

Q. And dues on \$1,000 of stock? A. Yes, sir.

Q. What is the advantage for him to borrow? A. The advantage for him to borrow is that by making payments he is creating a sinking fund for the extinguishment of his debt, and that is the essential difference between savings banks and building and loan associations.

Q. Is the total amount he is required to pay monthly calculated on what is necessary for a sinking fund, whenever he shall have paid in enough to pay it off? A. Yes, sir. That is the stock dues.

Q. Suppose he borrows \$1,000 for seven years—we won't mention anything about stock—how much is calculated each month at 7 per cent to pay that \$1,000? Is it enough to pay it off in seven years? A. It would be calculated, under the circumstances you state, at a sufficient amount to pay 7 per cent interest.

Q. Suppose he is required to take one thousand shares of stock to get that loan, how much in addition is he required to pay? A. Nothing at all.

Q. Nothing at all? A. No, sir; because the principal part of that would be stock dues; that is the difference between definite-contract and regular building and loan loans, where a man pays on his stock, and he pays his interest and has his stock entered in one column of the book and the interest in the other, and by figuring up that column and deducting it from the face of the loan, can easily, at any time and at any month, know what his relations are to the association, and that man has no kick coming.

Q. The point I wanted to make was as to whether or not, in that dual relation, the lender's figures show up a certain amount on both? A. No.

Q. You say that at the end of seven years he has the debt paid and the stock paid for? A. Not at all; payments of the stock are supposed to be sufficient to bring that stock to maturity at a given time, and that stock is canceled.

Q. That stock is canceled? A. Yes, sir.

Q. What becomes of the stock? A. It is canceled and the value of it credited to the loan account. One offsets the other. In mutual associations it has got to mature before the loan is paid off. Of course, that has been the practice in many associations by crediting each \$100 of the note as it comes in.

Q. Let me get your explanation of this matter I have here. I don't know whether I put this question to Mr. Grange, but I did to Mr. Fields. Here is a man who says: "I borrowed \$1,000 for seven years, for the use of which I gave a note and a deed of trust on my house and lot, each having a life limit of seven years. The contract was to mature at the end of seven years. The interest on \$1,000 is \$17 per month—\$10 is interest, \$6 as shareholder, and \$1 on what is called premium. During four years they have applied to my earnings \$155. In other words, they have reduced the debt from \$1,000 to \$885." What would you say about that? A. I would say that he was a member of a very badly managed concern. I should say that he was a member of an association charging expense fund, which, if you adopt this bill, it would do away with.

Q. Which one does away with it? A. The Waste bill does away with it.

Q. In other words, he was not getting a contract whereby it matured in seven years? A. No, sir. The fact that the note was written for seven years you would see, by reading the by-laws and contract, that there was no agreement to have that amount paid off in seven years. That is where they buncoed the man.

Q. That is the proper word for it? A. Yes, sir.

Q. Put it down. A. It is, then, this contract that I want to see eliminated from building and loan associations and yet not put the small associations out of business and in favor of the large associations in large cities.

THE CHAIRMAN: Mr. Grange made the suggestion that if the plan suggested by him were adopted there would not be a local association in California. A. In another one of his talks he said he did not believe in the shoestring associations. What does that mean? It means that a few men, neighbors, men of standing, of character, but not capitalists, live in a small town, but will be forbidden to get together, as they have come together in all the towns in the United States in the past fifteen years, and organize a beneficial mutual association for enabling workmen and mechanics to acquire a home by way of monthly payments, in a way that they could not possibly do without the aid of these organizations.

Q. When such men meet together and form a building and loan association, what security do they offer? A. They offer their character; there is more in this business than simply dollars and cents; there is character. You can legislate from now until doomsday, and you can not prevent a dishonest man from robbing the public once in a while. You can surround him with penalties, but that is all you can do. You can pass laws about depositing securities, but if you get a thief behind your counter he will rob you sooner or later.

MR. CURTIN: Q. But when the investor wants his money back he doesn't want character, he wants his money. A. Yes, sir; and if he has got character he will get his money back. You speak of failures in building and loan associations and compare them with failures in sav-

ings banks. I say, and Mr. Fields will indorse my statement, that there have been more failures in the last twenty-five years in savings banks than in building and loan associations. Is that not so?

MR. FIELDS: I would not want to say.

MR. CURTIN: Q. You are getting to the difficulty right now. I believe if you want to do business, do it on business principles? A. That is right.

Q. Leave out the character. Don't depend so much on character, but depend on the law itself? A. You can make a law to govern these associations as in the past, but if you make a law that no association shall start up unless it has \$1,000,000 or \$50,000 worth of capital, you put that whole line of associations out of business.

MR. HAHN: Q. If the amount of capital stock in the smaller place were small, would it not be better to require them to have something substantial than to allow a few men to get together, start building and loan associations, and taking it for granted that they are all interested, but after running a year or two they find there is not enough in the business to pay running expenses. That would necessarily entail a loss. That would be doing business on the shoestring plan that Mr. Grange was speaking of. I think that was what he referred to. Would it not be better to have something substantial? A. It might be, within reasonable lines, within reasonable restrictions.

Q. He suggested that for big cities it be \$1,000,000, and grade it down to smaller communities.

MR. CURTIN: Q. Don't you think Mr. Grange's statement is correct? A. These small associations start in in a very small way and practically no expenses. As building and loan statistics show, they limit their expenses not per share, but per cent of expenses on their earnings or on their capital or on their loans, and it is about half what it is in the larger associations.

MR. HAHN: Four building and loan associations started in in Pasadena, all of which managed to do business for more than two years, and all of the officials were honest men and men of reputation; but because the secretary did not wish to give his whole time to the business, and the directors depended on the secretary to attend to the business, and after being in business a year or so they decided they could not make a success of it, and the result was that almost every person who purchased the stock sustained a loss. A. Yes, sir.

Q. To follow that one statement there should be something done to prevent such a thing as that? A. Yes, sir.

MR. CURTIN: Q. Do you think that the building and loan law could wisely provide for an association of original incorporators, require a deposit or paid-up fund of so much money, and then provide for a distribution pro rata so that the men who paid up the money would have an income and those who would come after would be let in on what you call the building and loan fund? A. Yes, sir.

Q. That would prevent loss? A. Yes, sir; and if you did not make that paid-up fund so large that we can not start them in small communities I have no objection to that.

Q. I have that in mind, and I would like to have you express your views on the proper pro rata distribution on that line of profits. I agree with you, Mr. Wade, that the small institutions, for instance a bank of \$50,000, or one of \$100,000, can become just as sound as one

with millions of dollars behind it, if it does its business on a good business basis; but I want to know if you think that the law can be so amended as to allow original promoters to have a paid-up capital of so much money, that thereafter he who desires to borrow may borrow and become a shareholder in what you call preferred stock and then participate in the concern after there has been paid on the preferred stock a certain amount? Do I make myself clear? A. Yes, sir.

Q. What do you think of that? A. Of that guarantee which takes all the risk, as I understand your proposition?

Q. Yes, sir. A. It takes all the risk, as guaranteed stock in a savings bank.

Q. Yes, sir. A. But with that guaranteed stock there should be set aside, first, a certain remuneration, and then over and above that stock the rest of the stock should share and share alike. What that remuneration should be it would be hard for me to state of a certainty, but I think it should be left, perhaps, to local institutions.

Q. It ought not to interfere with the prospect and progress of mutual building and loan associations? A. I don't think so, unless you made that initial capital prohibitive to small associations.

Q. Do you destroy the mutuality of the concern? A. No, sir; I think not. But of course, in stating this about distribution of profits to guaranteed earnings, I am giving my opinion only and am not speaking for the Local League.

Q. I understand that. A. Because I have not consulted with them.

Q. I am only asking you because the question comes to my mind, you being experienced in that business and should have some valuable information on that subject. A. I think that all investors should have the right of withdrawal by giving notice of not more than sixty days of their intention to withdraw, one year from their entrance in the association, and that on said withdrawal such a member shall be paid back all the money invested by him in the association except the admission fee, which should not exceed \$1 a share, and with such proportion of the divided earnings as the by-laws of such association should provide. I think that fines may be imposed for non-payment of monthly dues by a stipulation in the by-laws. Such fines should not exceed 10 cents per month for each \$100 loaned, and 5 cents per month per share on investment stock. That is to cover the cost of serial associations that divide their earnings on a series and must provide a fund for non-payment of dues during that series. Transfer fees may be provided for in the by-laws, but not to exceed \$1 for each hundred transferred.

MR. HAHN: Q. Why put that in? A. Because that is for clerical labor invariably, and it costs very little more to make one hundred transfers than it does to make one.

MR. CURTIN: Q. That is based on business experience? A. Yes, sir; the stock is generally held in one certificate.

MR. ANDERSON: Q. I thought you stated a little while ago that you favored the idea of stockholders being able to withdraw at any time? A. Yes, sir; by giving sixty days' notice. I said not over sixty days.

Q. I asked you at any time, and there was no limit then. A. I did not understand your question to me without notice. As a matter of business dealing, I think that members should be allowed to withdraw without notice, but to guard against a risk of many withdrawals, against the condition of specially large withdrawals, the association should have the right to demand a withdrawal notice of thirty or sixty days.

Q. Which would you say? A. I would say, for myself, thirty days; I said not over sixty days. There are many that are asking sixty days' notice.

Q. Thirty days, in your opinion, is sufficient? A. Yes, sir.

Q. You say that they are not allowed to give thirty days' notice until after being in the association for one year? A. Well, I suggested that.

Q. Why do you compel them to stay in for a year before they can get any money out at all? A. I take it that if you have been having a man's money for a year without interest, you ought to be able to give it back to him.

Q. But if the condition of the company be such that he might get his money out in thirty days without waiting a year—— A. (Interrupting.) We do that.

Q. But all companies do not? A. I don't know.

Q. Why can't they, if they don't? A. I don't know.

Q. Do you think it possible for them to do so? A. I think it is possible.

Q. Do you think it is possible for a man to draw his money out at any time after giving thirty days' notice? A. Yes, sir; if he has paid his admission fee.

Q. That is what I think. I don't see why a man should have to stay in a company for a year, if he wants to move away; he should get his money. A. Yes, sir.

Q. Suppose, now, that he stayed in for the year—shall have paid fines from time to time. Will he get back the fines at the end of the year? A. No, sir.

MR. CURTIN: Q. A fine is a forfeiture, in a sense; they are bound to lose that? A. Yes, sir.

MR. ANDERSON: Q. Should not fines be repaid, Mr. Wade, when a man has redeemed himself? A. Fines should only be charged, in my opinion, against investors where the earnings are divided on the serial plan. Where the earnings are divided on the "Dayton" plan, where an individual account is kept for the depositor and for the stockholder, and his account is based on what he actually paid in and not divided on the serial plan, well, I can see no excuse for fines against investors.

Q. In response to a question propounded by Senator Hahn on the subject of fines, you said that the 10 cents fine was to make the borrower more prompt—the borrower and investor, did you not say? A. No, sir; the borrower.

Q. The borrower more prompt? A. Yes, sir.

Q. That is a dead loss to him and a dead gain to you? A. Yes, sir.

Q. Why should he not get back that fine? A. It is supposed to cover the loss of the use of the money by the associations. If a man gets behind six months in his payments, you won't have this money to loan out again. If he gets behind six months and then comes along and pays it up, should he not make the loss good to the association in some way?

Q. I see; he has had the use of the money—— A. (Interrupting.) He has had the use of the money when he should have paid it to the company. That is one reason, and another reason is that you will have a great many delinquent borrowers if you do not have a system of fines in building and loan associations. Another suggestion that I want to make is that the Building and Loan Commission should be one commis-

sioner and a deputy to see that the laws are strictly enforced, and give them the power to act and see that the provisions of the laws are carried out. That would cure most of the evils existing in the building and loan business.

MR. CURTIN: Q. Supposing that the incorporation laws relative to all building and loan associations should provide that a certain amount of paid-up capital should be advanced by those who were promoters, and that capital shall be invested in bonds of a certain denomination—city bonds, national bonds, school bonds, etc.—and these bonds deposited with the State Treasurer, these would be what Mr. Grange called valuable assets? A. If they were deposited with the State Treasurer for the purpose of securing the investors in the association, I don't see how they would be quick assets at all. I should think they would be "unvaluable" assets.

Q. Government bonds find a ready sale at any time? A. Yes, sir.

Q. You will see the idea I am coming to, and I want to get your opinion. Suppose we started out with a law that required the original promoters to put up cash in an amount say not to exceed \$50,000, and that is deposited either in securities or in cash in the State Treasurer's office; such fund to be used for withdrawal purposes, as a guarantee that each and every person who puts in an application for withdrawal would get his money; suppose the law should make it stand for withdrawal, would that be advisable or not? A. It would not be advisable to tie up \$50,000 in cash in the State Treasurer's vaults where it would not be drawing interest. I think the better plan would be to let the association lend that out on its usual plan and get its usual rate of interest.

Q. We have testimony that the association requires this capital to be used. A. That requirement is based on the present law, which does not require the cash capital to be paid up.

Q. I am getting to it that if the law required the cash capital to be paid up, and suppose—well, say that the man who paid that first \$50,000 of stock which we say is preferred stock, all the other business along these lines would be along the lines you are now carrying on, and would be based along common stock. If, then, say \$50,000 were deposited in the State Treasury, could it not be required as the guarantee funds for each withdrawal made, and this money derived from any stock transaction could be constantly loaned out to make the association prosperous—could it not provide that when the money was all out, the common stock, whatever was required from that \$50,000, could meet withdrawals, and then whatever came from common stock could be placed there to keep that fund intact; would that interfere with the workings of the association? A. Yes, sir; I think seriously.

Q. You don't think such a plan as that could be devised? A. I don't think it could be devised, and I think it would entail loss on the association.

Q. In what respect? A. You might buy your bonds when they were in demand and bringing a good price, and you might want to sell your bonds to meet an extraordinary run on you when there was one on other institutions and when bonds were not selling at the price you paid for them.

Q. National bonds, government bonds, municipal or school bonds are never below par. A. That is right; but a building and loan associa-

tion does not want to tie up its assets in two or three securities when it can loan them at 6 or 7 per cent.

Q. I am now providing as a guarantee fund for the payment of withdrawals as they are presented without being required to wait for this money to come in. A. It could undoubtedly be done, but not without a loss——

Q. (Interrupting.) If the money is all paid up in the first place, with the idea that it should stand for that, you go in with the idea for a reserve fund in the first place and a preferred stock that shall bring a like gain as 3 per cent government bonds or 4 per cent school bonds, as the case might be. Would not that last equalize itself by providing that the interest paid on the preferred stock should never exceed the earning power at any time; if it was invested in 3 per cent bonds it should not exceed that amount? Could not that be done? A. You could never sell the stock.

Q. You don't think you could sell it? A. No, sir.

Q. There are men every day in the week who would buy government bonds. A. But they would not want them tied up in the State Treasurer's vaults.

Q. If they were guaranteed the same returns—not guaranteed, but they would be given that idea by the laws. A. In my judgment you could not make it work. I don't think you could get men with \$50,000 to put it up in that way.

Q. I am only asking you about the theory; if it is impracticable. You and Mr. Grange would know whether it would be feasible. Do you think that there is a stockholders' liability, and the fact that it would bring such a small return would prevent it? A. Absolutely so.

THE CHAIRMAN: It would have another effect; the low earning price of the security makes it just so many more years for the stock to mature. A. That is right.

Q. When you make your earnings 10 per cent your stock will mature sooner than if you only made it 2 per cent?

MR. CURTIN: Q. You don't think such a plan as that would be possible, Mr. Grange?

MR. GRANGE: No, sir.

Q. You could not divide the common and preferred stock in such a manner as to induce investors to that extent?

MR. GRANGE: I don't think so.

MR. ANDERSON (to Mr. Wade): I want to ask you the same question I asked Mr. Grange as to the depositing of these securities. You would advise the depositing of all securities, other than that loaned on stock, with the State Treasurer or a trust company until the stock was paid? A. No, sir; it would not work, and it is absolutely worthless.

Q. Explain why? A. I will try and explain why, in my opinion. The reason it is impracticable is this: You deposit your securities in the vaults of the State Treasurer in Sacramento, or in the hands of the trust company in Los Angeles if you wish. When your association gets to a certain age and a certain size, every day people are coming in to pay on their loans; there would be on an average a loan paid for every day. When they pay off these loans they are entitled to their securities, are they not?

MR. HAHN: If you make the law that they would not be until certain red tape is gone through—— A. (Interrupting.) Then you are spending a great deal of time on red tape.

Q. Does it hurt any? A. I think it does. I put the case of a man in Visalia who has a loan with an association in Los Angeles. He requests that his securities be sent to the bank for collection.

MR. GRANGE: A reconveyance can be filed, and he gets his note back when the County Recorder certifies that the reconveyance has been on file. That practice works without any trouble at all.

THE WITNESS: Here is the trouble: it does not accomplish what you want it to accomplish. You are guarding against embezzlement by your directors. You put that in the hands of a trust company, but if your directors are men who will embezzle anyway when they get a chance, they will wait until they get a sufficient amount of money, and not having the securities in their hands, they will embezzle that. I say you can not legislate against that, no matter how many laws you put on the statute books to-day.

THE CHAIRMAN: Q. You made a statement in which you said that that system of depositing securities with trust companies or the State Treasurer was impracticable from your point of view? A. Yes, sir: for these reasons.

Q. If that system was in force at the present time by reason of the law of the State of California, and was so being practiced, would you say that it was impracticable? A. Yes, sir; I would say so. I say that the depositing of these securities on the part of an association is no protection whatever against embezzlement; that if people who are in a position to embezzle want to do so, they will simply wait and embezzle the cash instead of the securities. These securities that are deposited with the trust company are being paid for every day, every week, and every month.

Q. Assume, for a moment, what was suggested by Mr. Grange: that the Bank Commissioners had the power to drop in on you at any time and examine your cash, as they do when they go to examine a bank? A. It might be a good thing, but it would not make a dishonest man honest.

Q. It would in a measure protect? A. Yes, sir: because a fellow thinks he might be called on any minute.

MR. HAHN: Q. I think I can show you where you are wrong when you say a man would take money when he is going to embezzle, just as he would securities. If he takes money, the loss of that money is going to be discovered. He can not take a great deal of it, because the association has not a great amount of it on hand at any time: he would be found out; but if there are half a million dollars' worth of securities lying in the vault, and he wants, say, \$100,000 worth for a week on a wheat deal, the temptation to use this in notes is apparent, and he is not going to find that much money lying around, and even if he did take that much from the association it would be found out very quickly; that is, if it was run properly. I have reference to the "one-man" association. I have reference to the association that is managed by the secretary, and the directors all dummies. A. There should not be such an association.

Q. As a matter of fact, are there not such associations in this State, and several of them? A. What I can not see is why any banker or money-lender would lend money on that security without a resolution of the board of directors authorizing such action.

Q. But the fact that they have done it—— A. (Interrupting.) I don't know that they have.

Q. I know that they have, and that is why I am speaking of it.

THE CHAIRMAN: Oftentimes you will find not only banks, but you will find building and loan associations and other corporations that will enter a general resolution on their minutes authorizing perhaps the cashier or the president, or both combined, whichever it may be, to hypothecate securities to some other bank or corporation with the purpose of securing a foreclosure or executing a note perhaps, or something of that kind. There are a great many banks that pass such a resolution and pass it by correspondence. When they have done that they don't have to get the board of directors hurriedly together for the purpose of voting over a question of ten, twenty, or fifty thousand dollars, whatever it may be; and that resolution stands in the correspondence constantly. They are trusting, as you said a while ago, to the honor of their employes and officers in doing it, but it has been for the purpose sometimes in the movement of credits and things of that kind. If such a resolution as that was put on record in a building and loan association, what would prevent the secretary, as Senator Hahn has said, from taking \$50,000 in securities? A. Yes, he could on that point.

MR. ANDERSON: We could pass a law, if it was constitutional, forbidding these companies to put up their securities.

MR. HAHN: I don't think you can.

THE WITNESS: Now, what way do you propose to withdraw these securities properly, so that they can not be withdrawn improperly?

THE CHAIRMAN: May I answer that question by asking what Mr. Grange would do under those circumstances?

MR. GRANGE: I would have these securities withdrawn only upon a resolution of the board of directors where mortgages are required for foreclosure by the president or secretary, and the certificate of the County Recorder of the reconveyance where the mortgages required are to be withdrawn by reason of repayment.

THE WITNESS: Then, if a man came to you, Mr. Chairman, with cash to pay for his indebtedness, and demanded his securities, you would have to stand him off until you called your board of directors and until you got a release from the Recorder before you could turn him over his canceled securities.

THE CHAIRMAN: What is your reply to that, Mr. Grange?

MR. GRANGE: That is not so, because when the association has filed for record with the County Recorder a reconveyance, then the note and old mortgage are valueless anyway.

MR. CURTIN: The cancellation of the record destroys the loan?

MR. GRANGE: Yes, sir. I am doing what I speak about every day in the week, and I never deliver a mortgage, deed of trust, or a note until after the recordation of cancellation or the reconveyance of the deed of trust.

MR. CURTIN: Q. A note or mortgage are simply bonds of indebtedness?

THE WITNESS: A. Yes, sir; but the borrower likes to get it.

MR. CURTIN: Q. It is prima facie evidence, and when it is recorded——

MR. HAHN (interrupting): If every concern was as honest as yours is, and if every secretary was as honest as yours is, there would be no necessity for our spending all this time, but we have got a whole lot to contend with.

MR. GRANGE: I would like to have introduced in the records the statement that the excerpts that I have presented to you from the rec-

ords in the Building and Loan Commissioners' office were prepared by an auditor by the name of Crook, in San Francisco, and forwarded to me here by mail; that none of the figures therein have been verified by myself.

THE CHAIRMAN: You did not prepare them?

MR. GRANGE: I did not prepare them.

MR. CURTIN: You are not prepared to state, then, that they are true and correct?

MR. GRANGE: All that I am prepared to say is that I have submitted the letter of an expert accountant.

MR. CURTIN: They ought not to go into the record with a statement of that kind, because it is hearsay.

MR. HAHN: It has been a funny proceeding, in this: that you have an expert to give his opinion. Mr. Grange was sworn here as a witness; he is not required to give us any facts, but he has given us his opinion.

MR. CURTIN: He has been giving us a whole lot of facts, but he wants to put in the record something he has not verified in any manner. I would like to have the man come here.

MR. GRANGE: I can have Mr. Crook here.

THE CHAIRMAN: What he wishes to convey here is this: He has simply submitted this to us for our information, and at the same time he wants to convey the impression to us that he does not vouch for it.

MR. HAHN: I don't think that we need to report this that it is simply for our own information.

MR. ANDERSON: I suggest that this matter of securities is a matter for this committee to decide on later. I want to ask Mr. Wade a couple of more questions. You heard Mr. Grange state that he would advise two Commissioners as well as a secretary.

MR. CURTIN: I think he said three.

MR. GRANGE: I said three would have all they could do and do it properly.

THE CHAIRMAN: Q. Providing this suggestion of yours were incorporated in the law, Mr. Grange? A. Yes, sir.

MR. ANDERSON: Q. What is your opinion of that?

MR. WADE: A. My opinion is that one Commissioner and a secretary, if they give all their time to it, in view of the fact that there are only about one hundred and forty associations in the State, could cover the field and do the work.

MR. HAHN: Q. As a matter of fact, one Commissioner and one secretary are doing all the work now and not giving it all their time? A. Yes, sir.

MR. ANDERSON: I want to ask Mr. Wade another question that I think is quite vital. Mr. Wade, as a building and loan expert and keeping track of what other companies do, do you know as a fact whether or not people who have paid in four or five years and then want to draw out can not get within a considerable amount of what they paid in? A. I know they have not got, under those circumstances, within a considerable amount of the money paid in.

Q. Let me put to you a hypothetical case: Suppose a person should be a stockholder to the extent of \$1,000—ten shares of stock, par value of \$100 each—and has been paying monthly installments into that concern for say five years. How much have you known such a person to lose—without reference to any company—such a person to lose on withdrawing that account? A. Five years on \$1,000 worth of stock?

Q. Yes, sir. A. Well, now, I have not got anything on this list that exactly complies with that condition.

Q. Under similar conditions? A. Here is one that has paid in for fifty-three months at \$15 per month; that is, four years and five months. He paid in to a certain association in that time, in regular monthly payments, \$795, and could only withdraw \$738.05.

Q. Is that one of the so-called solvent and reputable concerns in this State? I don't want the name of it.

MR. HAHN: I think we ought to have the name of it.

MR. CURTIN: I think you had better give the name of it.

MR. GRANGE: There are two associations in this State that do that sort of business and that are solvent.

MR. ANDERSON: We want to know whether these things prevail now—

MR. HAHN (interrupting): I would like to know the name of that company?

THE WITNESS: It is old history; but I know that it is the case, and those kind of things hurt the business.

Q. The company is doing business? A. Yes, sir.

Q. How long ago did that happen? A. A matter of two years or over.

MR. CURTIN: Q. What company is it?

MR. HAHN: What company is it? We want to know what it is?

A. It is the Protective Savings Building and Loan Association.

Q. Of Los Angeles? A. Of Los Angeles.

Q. Do they do that right along? A. I could not say.

MR. CURTIN: Q. What other company does that? A. There are several companies—different plans—and you take any company with the expense-fund plan and earnings, it takes several years before the stock will mature without a loss.

THE CHAIRMAN: You said that if certain legislation was enacted it would drive certain building and loan associations out of business?

A. As far as that is concerned.

Q. I mean strictly building and loan associations. How many of these have been organized in the last two years? A. I don't know.

MR. HAHN: Q. Mr. Fields, how many building and loan associations have been organized in the last two years?

MR. FIELDS: A. I only call to mind one in the past two years under the building and loan laws.

THE CHAIRMAN: In violation of the building and loan laws that is constantly going on, and from a statement by Mr. Fields, talking with his experience, building and loan associations will finally close up and go out of business, and it will not be a great while before there will be none at all, is it?

MR. HAHN: The big ones are still doing business.

THE CHAIRMAN: On that theory, apparently, there are not many being organized for business.

MR. GRANGE: I think, Mr. Chairman, if you will place such a law on the statute books as I have suggested, that there will be more building and loan associations incorporated in this State in the next year than there have been in the past year or two.

THE CHAIRMAN: You think it would promote building and loan associations? A. I think it would promote them.

THE CHAIRMAN: Mr. Wade thinks it would put them out of business.

THE WITNESS: Yes, sir.

MR. CURTIN: Q. Do you think the plan proposed in the Waste bill, providing for withdrawals, should be indorsed, Mr. Wade?

THE WITNESS: Yes, sir; I do.

[Here the meeting was adjourned, subject to the call of the Chair.]

EIGHTH SESSION.

SACRAMENTO, CAL., February 21, 1905.

SUGGESTIONS FOR AMENDMENTS, ETC., TO BILL.

SECTION 635.

(BY CLARENCE GRANGE:) Guarantee capital stock shall not be subject to withdrawal until all the creditors and stockholders have first been fully paid.

MR. CURTIN: Q. What do you mean by "withdrawal"? Why don't you use the word "surrender"?

MR. OTIS: Because the term "withdrawal" is a building and loan man's term and is well understood.

MR. CURTIN: Yes, by the building and loan man, but not by the layman, and that is the man who ought to have a perfectly clear idea of the terms of his contract.

MR. GRANGE: Don't you think that is rather a play on words, Senator Curtin?

(BY CLARENCE GRANGE:) Free shares of stock are shares of stock that are not pledged as security for any loan.

SECTION 636, LINE 93.

Insert the word "monthly" before the word "receipts."

(BY CLARENCE GRANGE:) I think, Senator Curtin, that there ought to be a limitation as to the amount a building and loan association can loan upon any property, and I think that they should be absolutely forbidden from taking stock from a member as additional collateral security, and of compelling a member to take stock.

(BY CLARENCE GRANGE:) Take the Hahn bill, Section 635, and strike out, beginning with the word "given," on line 127, down to and including the word "loans," on line 129.

Hahn bill, page 4, line 106, "On premium," etc.

MR. CURTIN: Q. Is not that all right, so far?

MR. GRANGE: A. No, sir; the other provision cuts out the word "premium." I contend that the word "premium" is nothing but a subterfuge and another form for the word "interest."

MR. CURTIN: Q. With the exception of that section, the rest of the Hahn bill suits your idea?

MR. GRANGE: A. Yes, sir.

MR. OTIS: I want to say that this section contains the one thing that distinguishes a building and loan association from a savings bank, viz.: loaning to its own members and stockholders. That is the one thing

above all others that is the distinctive mark of a building and loan association, and if you wipe it out you destroy the very foundation of building and loan associations.

SECTION 635, WASTE BILL, LINES 76-84.

MR. CURTIN: Q. That means that they can, when they so decide, retire any free shares of stock?

MR. OTIS: A. Yes, sir.

Q. Doesn't that mean that by forcing out the free-stock holders at any time, the profits would be divided up with the reserve fund? A. It still remains in the association.

Q. But the profits? A. Are apportioned every six months.

Q. Then, after forcing all these men out by this means, those who remain in are to divide the reserve fund? A. No; the borrowers are still there.

Q. But when you get them all out, the reserve fund is divided among the little bunch left? A. Yes; if the association is ended and is in final liquidation.

Q. But what have the free shares of stockholders participated in? A. In the earnings for six months.

Q. But just as you are ready to declare these earnings you force them out? A. But then they get the whole amount paid in and their proportion of the earnings.

Q. But what is the object of forcing them out? A. On account of an accumulation of money on hand which they are unable to loan.

Q. Then, do you think it is a benefit conferred on the other fellow by forcing the holder of free stock out? A. Yes, sir; it is a benefit by reason of the idle money taken out.

SECTION 634—DEFINITION OF WORD "INSOLVENCY."

MR. CURTIN: Q. I would like to have a definition of the word "insolvency" as understood in building and loan associations.

MR. OTIS: Here is Mr. Wright, an attorney from Oakland, who can probably give you a very good one.

MR. CURTIN: I would like to hear it.

MR. WRIGHT: Whenever the assets of a corporation are insufficient to pay the technical debts of the corporation, and insufficient, after paying these, to repay to the stockholders the amount that the stockholders paid in in dues, the corporation should be insolvent.

SUGGESTIONS OF MR. OTIS FOR AMENDMENTS TO BILL.

Include definition of capital stock.

Also, one of insolvency.

Also, one for repaying everything to investor that he has paid in.

Do not permit the charging of any withdrawal fee whatever. It would certainly be better to have a larger membership fee.

Membership fees to be paid into the association and accounted for by it.

Do away with the so-called "expense fund" and provide that the amount used on all expenses be accounted for, for the benefit of the stockholders, every six months or year.

o Maria H
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